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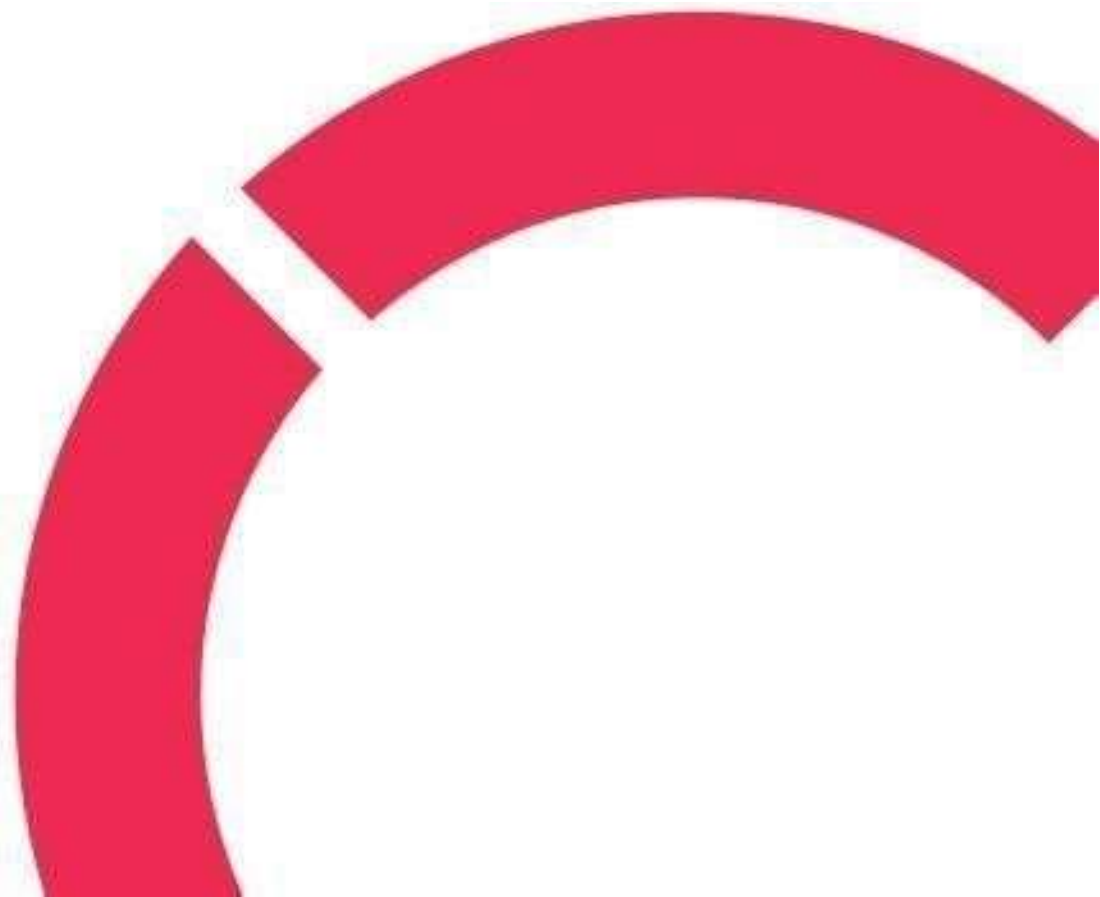
**EDUCATIONAL VIDEO FOR NURSING STUDENTS ON SURGICAL
INSTRUMENTS MAINTENANCE PROCESS**

Thesis

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<p>The primary purpose of this thesis project will address critical need in nursing education, especially in the context of clinical skills development. It attempts to bridge the gap between academic knowledge and actual competence by stressing the correct cleaning, maintenance, and sterilization of surgical instruments. By doing so, it hopes to greatly improve the overall quality and safety of patient treatment in hospital environments. This thesis will create instructional films for nursing students at Centria University of Applied Sciences. This study will assist students in learning critical knowledge regarding surgical instruments maintenance methods. This video will assist all international overseas students.</p> <p>This thesis is based on a demonstration of the surgical instrument’s sterilization procedure for Centria University of Health Science's first- and second-year nursing students. This video is appropriate for English-speaking nursing students, although Finnish students can also use it as a reference.</p> <p>By requesting special authorization from the Soite sterilization instrumentation section, the instructive video was prepared in collaboration with the Centria UAS thesis supervisor. The video begins with an overview of the sterilizing procedures and progresses until the instruments are ready for deployment in their respective locations. In the end, the film will be given to the nursing faculty at Centria University of Applied Science for instructional and reference purposes.</p>		

<p>Key words Decontamination, Cleansing, Surgical instrument, Sterilization, and maintenance</p>

Table of Contents

Contents

1	INTRODUCTION	4
2	THEORETICAL FRAMEWORK	5
2.1	Cleaning, Decontamination, and Sterilization of surgical instruments	5
2.2	Care And Handling of Basic Surgical Instruments	8
3	PROJECT PURPOSE, AND OBJECTIVES	9
4	PROJECT CIRCLE	10
4.1	The Project Life Circle	10
4.2	Project Initiation and Planning	10
4.3	Project Implementation	12
4.4	Project Closure	12
4.5	Feedback of Video from Students	12
6	DISCUSSION	15
6.1	Methodological Considerations and Limitations	16
6.2	The Importance of Thesis for Nursing Education	16
6.3	Conclusion	18
6.4	Project Reflection	19
	REFERENCES	20

1 INTRODUCTION

This thesis aims to create and publish a video about the maintenance and sterilization of surgical instruments. The information and process are based on the Finnish guidelines so that the students, new healthcare workers and educational institutions can utilize it as a source of learning. The purpose of the thesis is to enlighten the skills on surgical instruments maintenance and sterilization processes. The instructional video is prepared for the students of Centria University of Applied Science nursing students, to promote learning.

The importance of academic, visual, and hands-on knowledge cannot be overstated in the nursing profession. Modern surgical equipment started with the introduction of stainless steel in the early 1900s. This was meant to ensure the nurses clean the equipment well and safeguard the safety of the patients. Medical technology has advanced dramatically with the advent of minimally invasive surgery and the availability of space-age materials. Today's minimally invasive surgical procedures and improved imaging technologies make it feasible to see into almost every nook and cranny of the human body without performing open surgery or spending time in the hospital.

Students in the nursing program are more likely to grasp ideas taught using a multi-media approach than they are using more conventional methods. By incorporating these videos into the classroom, teachers may create a more realistic setting for their students to learn in. Videos give a step-by-step visual representation of the theory, allowing students to put it into practice. In the end, students who learn through videos are more confident in their ability to put what they have learned into practice. Students are more likely to retain visual and audio teaching programs than theoretical teaching approaches that rely only on textual content, which may be difficult to remember (Chao et al. 2021).

2 THEORETICAL FRAMEWORK

In this section the authors describe the proper cleaning, maintenance, and sterilization of surgical instruments. Nursing students' knowledge and skill levels will be assessed after watching the video to evaluate whether this approach has a better influence on raising nursing students' skill levels than other educational techniques (Jeong, 2017).

Decontamination of instruments, devices, and equipment via a manual or mechanical technique that removes adhering visible dirt (blood, protein compounds, and other detritus) from the surfaces, crevices, serration, joints, and lumens that have been used on a patient need to undergo sterilization process before they may be reused (Chang et al., 2018).

2.1 Cleaning, Decontamination, and Sterilization of surgical instruments.

Instruments that have been used on a patient need to undergo sterilization process before they may be reused. Because studies have demonstrated that filthy equipment cannot be successfully sterilized, this step is of critical significance (Chang et al., 2018). This is because the soil acts as a barrier between the sterilizing media and bacteria and viruses. This means that germs and viruses might escape sterilization and infect a subsequent patient through cross-contamination.

Several innovative sterilizing and instrument processing technologies have also been extensively used in addition to advancements in instrument design. Consequently, the knowledge base of the person in charge of instrument maintenance and handling has grown dramatically. Additionally, properly clean, disinfect, and sterilize instruments, the individual responsible for their upkeep must be well-versed in the technologies involved in both the cleaning and sterilization processes. Processing surgical instruments correctly requires a high level of ability, and as a result, many facilities now demand certification of processing staff. Certification is now needed for employment in at least one territory, with other states likely to follow shortly (Chang et al., 2018). It is essential, however, that the device is safe and clear of pathogens before deploying it on a patient. To do surgery, surgical instruments must be in perfect functioning order and well cleaned and processed. An incorrectly sterilized surgical instrument may lead to a lengthy procedure, poor surgical outcomes, patient infection, patient damage, and even death. It is estimated 98,000 people are injured each year in hospitals, according to a study by the Institute of Medicine in November 1999 (Mamalis & Chang, 2018). In the aftermath of the study, health care practitioners were reminded of the need of instituting systems to avoid mistakes. There is a constant emphasis on patient safety in the healthcare profession as a consequence. The safety of patients depends heavily on the proper use and upkeep of medical instruments. For purposes of subsequent processing or intended use, cleaning is defined as "removal of contaminants from an object to the amount that is required." In addition, according to the Association for the Advancement of Medical Instrumentation, "In health care facilities cleaning is defined as the removal of adherent soil (e.g., blood, protein substances and other debris) from surfaces, crevices,

serrations, joints and lumens of instruments, devices and equipment by a manual or mechanical process that prepares the items for safe handling and/or further decontamination." (Alfa, 2019.)

Occupational Safety and Health Administration (OSHA) defines decontamination as "the use of physical or chemical procedures to remove, inactivate, or eliminate blood-borne pathogens on a surface or object to the point that they are no longer capable of spreading infectious particles and the surface or item is made safe for handling, use, or disposal." (Mamalis and Chang, 2018). It is possible to get a decontaminated device with proper cleaning. After the washing process in a mechanical washing machine, a heat or chemical treatment is used to sterilize the machine and make it safe to use. Using the manufacturer's guidelines, manual cleaning may make a gadget safe to use even when it does not use chemical or heat processes. The Instruction for use should be checked to see whether further steps are needed to make the device safe to handle.

Before cleaning, everything that may be dismantled must be done according to the manufacturer's instructions for use (Alfa, 2019). Instruments are transferred to a designated location for cleaning and disinfection in leak-proof containers or trays covered in plastic bags. Instruments should not be carried in water-filled basins since the water might leak out and harm the instruments. Instruments should be cleaned away from patient care areas and locations where clean operations are carried out to avoid cross-contamination. Central Processing Department, or Sterile Processing Department, is where the decontamination area is most usually located. The use of enzymatic foam or gel to prevent debris from drying and adhering to the device and the formation of biofilm is recommended for instruments that can tolerate immersion but cannot be cleaned right away (Alfa, 2019).

Instruments are cleaned by removing dirt that has adhered to the surfaces, crevices, serrations, joints, and lumens. Detergent, water, and friction are used in cleaning, which may be done manually or automatically. It is critical to use the detergent correctly. The proportions specified on the label should always be followed when mixing detergents (Yamashita et al., 2019). Disinfection and sterilization processes may be hampered by enzyme detergents that are either over- or under-concentrated or that have been inadequately washed.

Mechanical cleaning is suggested whenever feasible. However, hand cleaning is required for certain specialized equipment and those that cannot be processed by immersion or mechanical means. Manual and mechanical cleaning are necessary for certain devices because of their design. Examples include bone reamers and laparoscopic devices (Yamashita et al., 2019). Mechanical cleaning alone may not be enough to remove the dirt from these devices, which may get clogged with debris and tissue. An enzymatic detergent may aid in the breakdown of organic soil. Crevice-filled reamers tend to collect dirt and may need to be wet and brushed by hand before they can be cleaned automatically. In the decontamination region, a lot will rely on the competence of mechanical cleaners. Flushing and brushing laparoscopic and other lumened tools is essential. An enzymatic detergent solution may be used to flush an instrument's ports by connecting a Luer-Lock syringe to one of them (Yamashita et al., 2019). Use a brush that is long enough to exit the shaft and wide enough in diameter to cause friction on lumen walls so that soil is loose. Laparoscopic and lumened device-specific mechanical washers and ultrasonic irrigators provide superior cleaning performance and are thus preferred.

When mechanical cleaning machines are not accessible or the instruments cannot withstand immersion, extreme temperatures, or pressures, the instruments must be cleaned manually. Manually cleaned surgical instruments should be submerged and allowed to soak in a cleaning chemical designed for this purpose. Open all of the box's latches, hinges, and joints before disassembling any instruments. Remove embedded particles from the serrations, box locks, crevices and lumines by brushing them.

2.2 Care And Handling of Basic Surgical Instruments.

Ten years is a reasonable expectation for a well-made instrument that has been well cared for. Proper cleaning, disinfection, and sterilization are the most critical factors in ensuring the long-term viability of an instrument. In addition to disinfection, packing, and storage, there are other factors (Mamalis and Chang, 2018). Each instrument has a certain function in mind. It's a certain way to damage an instrument if you use it in an unforeseen way.

Preventing stiff joints, malfunctions, and the degradation of stainless-steel equipment may be achieved by careful cleaning of surgical instruments before and after surgery. Sterilized distilled water in the sterile field should be used to clean surgical tools that have been contaminated with blood or tissue. It is critical to thoroughly rinse hinges, joints, and crevices to remove blood and other impurities (Mamalis and Chang, 2018). It is possible for blood and other foreign matter to get lodged between jaw serrations, between scissors blades, or in box locks, making final cleaning more difficult and the sterilization or disinfection procedure inefficient if not removed. Instruments might grow brittle and even shatter as a result of this.

A tangled, damaged, and misaligned mess of instruments may be avoided by treating them with care and gentleness, either individually or in small batches. They should not be flung into the basin during or after operation. The heavier instruments should be placed at the bottom, while the more delicate and sensitive instruments should be placed at the top. Fiberoptic cables and rigid endoscopes should be put on top of each other or apart. Fiberoptic wires should never be tightly coiled (Mamalis and Chang, 2018). The technique is completed by disassembling all devices that can be submerged and opening all box locks. To avoid tangles or piles, take special care not to stack them too high. It is imperative that instruments be returned to their proper containers or baskets, and that they are transported to the decontamination facility in a safe and secure manner.

3 PROJECT PURPOSE, AND OBJECTIVES

The primary purpose of this thesis project is to address a critical need within nursing education, particularly in the context of clinical skills development. It aims to bridge the gap between theoretical knowledge and practical competence, emphasizing the proper cleaning, maintenance, and sterilization of surgical instruments. By doing so, it intends to contribute significantly to the overall quality and safety of patient care in healthcare settings. The purpose of this thesis is to produce educational video for nursing students at Centria University of Applied Sciences. The purpose of this study is to provide the students with the essential knowledge regarding surgical instrument maintenance procedures. This video is beneficial for all international students to watch. The video shows how surgical instrument maintenance procedures are carried out. This thesis makes use of all evidence-based resources and materials used in Finnish hospitals as well as those used internationally. This program is exclusively intended for new students and only contains theoretically accurate materials, which is essential for all new nursing students at Centria. This study can be used for both in-class instruction and independent study. First-year nursing students may find the video we made helpful, as Centria's nursing courses are highly practical. As early as their first year, students can start researching the different nursing specialties. There are in-person and online theory classes offered. Theory classes can be taken independently, online, or through in-person instruction. In a similar vein, the school might utilize this video as a resource. (UAS Centria, 2022).

4 PROJECT CIRCLE

Implementing a project involves carrying out the planned and anticipated targeted goals to meet project objectives and produce the best outcomes and results. Many internal and external factors both affect and contribute to the project's success. Effective project, risk, quality, change, and expense monitoring are a few that come to mind. The management system ought to be more flexible in response to changing conditions and present needs because of updated technology and an expanding body of advanced research. The highest quality work should, however, always be the goal for managers. In accordance with the lead partner principle, the lead partner will take full responsibility for project management. In this case, however, the responsibility for monitoring the work falls to both authors. (ETC Regulation (EU) No 1299/2013, § 23.4)

4.1 The Project Life Circle.

According to (Coyne et al.,2018) stated that the process of creating an instructional video, as part of our project, follows a defined project lifecycle. This lifecycle spans from the initial concept to the final product. Educational videos come in various formats, including direct instructor presentations or subject matter experts providing step-by-step guidance. Our instructional video aims to leverage the advantages of this medium in nursing education.

4.2 Project Initiation and Planning.

The phase of project initiation commences when it is decided that a new project is necessary. The initiation phase comprises multiple tasks to initiate the formal planning procedure before it can begin. This phase involves creating the project's initial schedule. Centria UAS was the source of the inspiration for starting this project. We could select from a selection of topics that the teacher had provided. The tutor supervisor was primarily in favor of a project-based approach when it came to producing instructional videos for our target audience. Clearly, the goal of the project was to create an educational and informative video about the subject. We reflected that video that shows the entire process of sterilizing surgical instruments would be beneficial to aspiring nurses. A thorough implementation plan needs to be created once the project has been initiated. To ensure that the project meets its goals, it is critical to estimate various alternatives during this phase. We held multiple group meetings during the first phase to begin the process of gathering theoretical background from different sources and to start the initial search for resources. The video production and script writing process began with a consultation with our supervising teacher and a request for permission from the Soite instrument sterilization department, which was granted. We considered the video from the perspective of Finnish health care standards, so that it will be useful for students doing their practices and may be possible from their work perspective in the Finnish health care sector. The planning process for our thesis video included planning the video, writing a script, retrieving materials, filming location and

permission, making the video, and editing. We began the video production process by taking into account all of the previously mentioned factors.

4.3 Project Implementation

Planned video production includes scripting, explaining, and video editing as part of the design process. Using the script, one can plan out how the video will be made and formatted and can also eliminate any material that is not relevant. Because so many details are established in the scripting stage, writing a solid video script is critical to the actual filming process (Stone, Cooke, and Mitchell, 2020). This script is what will be used to create the video's content; without it, there would be nothing to shoot. At this point, the shooting location has been selected, central instruments sterilization in Soite and any obstacles that may arise should be identified and potential solutions be developed to ensure that the shooting process will not be impeded or stalled. So that when shooting begins, everything will go as planned and the project will move forward without hiccups, all pieces to be shot have been selected and all other factors have been established (Hakkarainen & Kumpulainen, 2011).

The explanatory element, as its name implies, provides information about every aspect of the video, from the selection of scenes to the methods used to capture the images. Behind-the-scenes details and on-camera action are covered in this section of the book (Stone, Cooke, and Mitchell, 2020). The entire filming process is described in this phase, from the moment the camera begins rolling to the moment the final shot is taken. At this stage, visual and audio elements are described, as well as the development of a finished video product is made possible by careful consideration of these two components. A step-by-step approach is used for the description to avoid skipping any elements that are critical to the video and could have an impact on the final product. The quality of the video is critical in making sure that students remain centered on the video and do not lose concentration. To deal with disruptions and noises in the background, methods are developed and detailed in the description phase.

4.4 Project Closure

After the scripting and describing phases, and after the filming has been finished, editing is the final step. The video was shot by my friends, and we did the editing. The video is edited in a variety of ways based on how it was scripted. The filming procedures may have been hindered by a variety of factors, resulting in a lower quality (Stone, Cooke, and Mitchell, 2020). Noises, lighting, and other variables that are modified to enhance image quality are removed during the editing phase, and a balance is formed between visual and audio aspects. Many discussions take place during this stage to guarantee that the video meets the quality standards specified in the script. Students will learn how to clean surgical instruments in a professional setting by watching this instructional video.

4.5 Feedback of Video from Students

A small sample of six Centria UAS Nursing students responded positively to the video's content, quality, and goal. Someone commented that the video should have been longer and should have included

documentation and delivery. Additionally, the respondents commented that the light and machine noise on the video background also had an effect on the video quality. Students who were asked to provide individual feedback and supported observation of the video recording rated the process as a more fruitful learning opportunity, and the feedback was significantly more well-received. Students assert that interactive video learning for teaching fundamental nursing skills is just as effective as conventional in-person general demonstration-based instruction. Along with the positive experience, the exceptional cooperation of the valintehuolto staff was mentioned. They also discovered that the situation was less stressful than they had anticipated. They asserted that they would not have deviated from this script because the methodical steps taken throughout are entirely valid.

5 THRUSTFORTINESS ON PROJECT BASED THESIS

The thesis guidelines of Centria University of Applied Sciences have guided the development of this thesis proposal. This thesis plan only makes use of reputable databases. The process of locating the cited sources will be scrutinized throughout the writing of this thesis outline. This thesis proposal relies on a wide range of sources. Scientific publications, studies, scientific literatures, and other examples are drawn from both worldwide and local sources. A variety of databases, including those at Centria Finna, were examined thoroughly for information. The goal of this thesis plan is to gather the most accurate and up-to-date information possible by relying on research and credible sources that are as recent as feasible. According to Centria thesis guidelines, all of the sources cited in this thesis proposal were appropriately annotated. In accordance with Centria guidelines, the instructive film will be recorded only after obtaining research authorization.

Centria University of Applied Sciences' reliability standards for academic integrity are upheld by the thesis. The legitimacy of the sources can be established since the literature evaluation, the investigations, and the scientific strategy for conducting the study were meticulously planned. Research that will be mentioned will correctly be credited to guarantee its origin can be found.

Only reputable resources were used while compiling the data for this thesis. There was an extensive review of the publications and knowledge base that were used in the thesis. The thesis also drew on research conducted in Finland. The translation was done with care to ensure that the material utilized in the thesis is accurate. It is simple to demonstrate reliability. A solid narration that has been translated into different languages may be relied upon in this film. Surgical instruments cleaning is certainly going to benefit from this thesis. Furthermore, it is simple to verify the sources from which the material cited was eliminated.

6 DISCUSSION

In consonance with the scholarly literature, our project's findings align with and reinforce several key observations made in the sources included in the theoretical framework. A significant body of research has emphasized the efficacy of video-based training as a superior method in nursing education (Stone, Cooke, & Mitchell, 2020). Our project builds upon this foundation by harnessing the power of multimedia, specifically through the creation of an instructional video focusing on surgical instrument maintenance and sterilization.

Our project's approach resonates with the studies conducted by Stone, Cooke, and Mitchell (2020), who highlight the undeniable advantages of video-based education. Our findings also support the notion that students perceive videos as an effective teaching tool, thanks to their flexibility, self-paced nature, and the ability to revisit content through repetition. These aspects are crucial for reinforcing and internalizing complex concepts and procedures (Nejadhamzeeigilani, Saunders, Macmullen-Price, Warren, Craven, and Currie, 2016).

Moreover, our project responds directly to the insights provided by Alfa (2019) regarding the current issues with cleaning and cleaning monitoring of medical instruments. By focusing on proper cleaning and maintenance procedures, our instructional video addresses a critical area of concern in healthcare settings. We emphasize the significance of adhering to stringent cleaning protocols to prevent cross-contamination and ensure patient safety—a point underscored by Alfa's research (Alfa, 2019).

Additionally, our project aligns with the research by Chang et al. (2018), which outlines guidelines for the cleaning and sterilization of surgical instruments. Our instructional video provides a practical resource that complements these guidelines, ensuring that nursing students not only understand the importance of sterilization but also possess the skills to execute these procedures correctly (Chang et al., 2018).

Furthermore, our project resonates with the findings of Chao et al. (2021), who explored the use of 3D interactive videos to improve nursing students' competence. While we may not employ 3D technology,

our video serves as an immersive learning tool, enhancing students' understanding of surgical instrument maintenance and sterilization through a multimedia approach (Chao et al., 2021).

In contrast to the concerns raised by Neuert, Meitinger, Behr and Schonlau, (2021) regarding the need for effective clinical skills education, our project addresses this issue directly. We recognize that nursing students require comprehensive training in clinical skills, and our instructional video bridges the gap between theory and practice by imparting essential skills in instrument maintenance and sterilization (Coyne et al., 2018).

In this chapter, we delve into a comprehensive discussion of the key elements and implications of our thesis proposal, "Enhancing Nursing Education through Multimedia Learning." We explore the methodological considerations and limitations inherent in our project-based study, emphasizing the significance of our work within the context of nursing education. Furthermore, we examine the profound impact of video-based training on student learning and competence, drawing upon existing research findings. Finally, we reflect upon the project as a whole, highlighting its overarching purpose and potential transformative effects on nursing education and patient safety. This chapter offers a critical analysis of our proposal's objectives, and anticipated outcomes, paving the way for a deeper understanding of the project's implications and future directions.

6.1 Methodological Considerations and Limitations.

In considering the methodology employed in this thesis proposal, it is essential to acknowledge certain limitations and constraints. The research design, predominantly focused on the development of an instructional video, imposes limitations on the depth of data collection and analysis. The primary research methods consist of literature review, expert consultation, and content creation, which may not provide the richness of data that extensive empirical studies would afford. Additionally, the use of qualitative and quantitative research methods could have offered more comprehensive insights, but time constraints and the nature of the project limited the scope of data collection.

Another limitation concerns the generalizability of the findings. While the instructional video aims to enhance nursing education, its applicability to diverse educational settings and cultural contexts should be further explored. The effectiveness of video-based education may vary based on institutional resources, student demographics, and the availability of technology.

6.2 The Importance of Thesis for Nursing Education.

The significance of this thesis lies in its potential to transform nursing education through the development and implementation of an instructional video on the proper cleaning, maintenance, and sterilization of surgical instruments. Modern nursing education demands innovative approaches to bridge the gap between

theoretical knowledge and practical skills. The introduction of multimedia tools such as instructional videos aligns with the evolving needs of nursing students and the healthcare sector.

Nursing students, as demonstrated in previous studies (Stone, Cooke, and Mitchell, 2020), benefit greatly from video-based training. Videos offer a dynamic, flexible, and self-paced learning experience that enhances their confidence and competence in critical nursing skills. By providing a realistic simulation of clinical scenarios and instructional video facilitate the transition from classroom learning to professional practice.

Moreover, the relevance of this thesis extends beyond nursing students to encompass patient safety and the prevention of hospital-acquired infections. Proper cleaning, decontamination, and sterilization of surgical instruments are paramount to safeguarding the well-being of patients. The educational video, once developed and integrated into nursing programs, has the potential to reduce the incidence of hospital-acquired infections, thereby improving the overall quality of healthcare delivery.

6.3 Conclusion.

This thesis proposal, "Enhancing Nursing Education through Multimedia Learning," has shed light on the transformative potential of video-based training in the field of nursing education. Our exploration into the intricacies of surgical instrument sterilization and maintenance has underscored the critical importance of proper education and skill development in safeguarding patient safety. As we reflect on the journey from conceptualization to proposal development, several key insights emerge.

Firstly, the significance of multimedia learning, particularly instructional videos, cannot be overstated in nursing education. As demonstrated by existing research (Stone, Cooke, and Mitchell, 2020), video-based training offers an effective and flexible approach to teaching nursing student's essential skills. The ability to visually and audibly engage with instructional content enhances comprehension, retention, and practical application. This project's objective to create an educational video on surgical instrument maintenance aligns perfectly with this pedagogical approach, aiming to empower nursing students with the knowledge and skills required for instrument sterilization and patient safety.

Secondly, the importance of maintaining surgical instruments properly cannot be emphasized enough. With the evolution of medical technology, the complexity of surgical instruments has increased, necessitating a deeper understanding of their cleaning, decontamination, and sterilization processes. Inadequate instrument maintenance can lead to a range of problems, from extended surgery times to patient infections, emphasizing the vital role that education plays in preventing these issues. By equipping nursing students with the knowledge and techniques outlined in our proposed instructional video, we contribute to a safer healthcare environment and a higher standard of patient care.

In conclusion, the educational video proposed in this thesis not only addresses the immediate need for improved instrument maintenance knowledge but also sets the stage for a broader transformation in nursing education. As we move forward in this endeavor, it is our hope that this project will contribute to the enhancement of nursing students' skills, ultimately leading to safer patient care and improved

healthcare outcomes. Through multimedia learning, we empower the nurses of tomorrow with the tools they need to thrive in an ever-evolving healthcare landscape.

6.4 Project Reflection.

Reflecting on the journey of conceptualizing and proposing this thesis, it becomes evident that the integration of multimedia learning tools into nursing education is both timely and essential. The project, "Enhancing Nursing Education through Multimedia Learning," aims to bridge the gap between theoretical knowledge and practical skills in nursing education. This initiative acknowledges the changing dynamics of education, with students increasingly seeking flexible, engaging, and interactive learning experiences.

The project seeks to leverage the benefits of instructional videos to empower nursing students with the competencies required for the meticulous care of surgical instruments. It is envisioned that this educational video will serve as a valuable resource not only for current nursing students but also for future generations of healthcare professionals. Furthermore, the potential impact on patient safety through the reduction of hospital-acquired infections reinforces the project's significance.

Throughout the development of this thesis proposal, the research team has recognized the need for rigorous methodology and project management principles to ensure the successful creation and implementation of the instructional video. Challenges and limitations have been acknowledged, and future phases will demand a multidisciplinary approach, collaboration with educators and healthcare institutions, and adherence to ethical considerations.

Moreover, this project exemplifies the significance of project management principles in ensuring the successful development of educational materials. Through the phases of planning, implementation, monitoring, and closure, we have strived to apply project management best practices to deliver a high-quality instructional video. This approach not only enhances the efficiency of the project but also aligns with the meticulous nature of nursing, where attention to detail is paramount.

We have examined the process from inception to proposal development. Reflecting on this journey, it becomes evident that the collaboration between nursing expertise and multimedia learning design holds immense potential. The fusion of these domains has the power to revolutionize how nursing education is delivered, making it more accessible, engaging, and effective.

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