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## The Impact of Psychological Interventions Given to ICU Patients to Help With Pain Management

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**The Impact of Psychological Interventions Given to ICU Patients to Help With Pain  
Management**

By

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NURS 4500: Nursing Research and Senior Thesis

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### **Abstract**

Pain management among the critically ill population is a significant issue in the intensive care setting. Whether the pain is acute or chronic, nurses tend to be the first-hand responders to help with pain management in the intensive care unit (ICU). With barriers ranging from patients' inability to verbalize pain to nurses' experience with obstacles to assessment such as sedation, confusion, or other concerns, pain management is a serious issue. Although pharmacological interventions such as opioids and analgesics help with pain control, in this thesis, we will focus on the impact of nonpharmacological and psychological nursing interventions and how it helps critically ill patients in the intensive care setting by reducing pain levels.

The main subtopics included in this paper that will be explored include:

- The Patient's Memory and Recollection from their experience with the ICU
- Patient's and ICU Nurses' Perspectives on Nonpharmacological Interventions, and
- Hands-on Nonpharmacological and Psychological Interventions that consist of music therapy, massages, and family presence/support.

This topic and these subtopics will be explored in the review of this literature and the proposal of this paper.

### **Introduction**

Pain is best described as an uncomfortable or unsettling physiological sensation that causes mild to severe physical discomfort and/or emotional distress (Merriam-Webster, 2021). Pain can also be an indicator that tells you something may be wrong with your body. Pain is something we, humans, all go through whether it is physical or psychological, yet the majority of patients in the intensive care unit will experience pain/discomfort throughout their stay in the ICU. Recently, there has been data showing that patients who have been discharged from the ICU recall painful memories and discomfort during their stay at the hospital. In the article *Patient Recollection of ICU Procedural Pain and Post ICU Burden: The Memory Study*, Myhren and colleagues have concluded that symptoms of psychological discomfort and distress were prevalent across intensive care unit survivors and that the memories about agony and pain, the inability of control and to articulate their needs were the biggest predictor of posttraumatic stress disorder in the intensive care setting (Myhren et al., 2009). This study suggests that there is a long-lasting psychological effect when it comes to inadequate pain management in critically ill patients during their hospital stay. The purpose of this paper is to explore the impact nurses can do non-pharmacologically to help patients in the intensive care setting with pain management.

### **Problem Statement**

Many patients in the ICU are not properly managing their pain and stress levels during their stay at the hospital. Pain is a significant issue in the intensive care setting, patients are unable to report pain due to a variety of issues such as mechanical ventilation, use of sedatives, as well as the consequences of loss of consciousness that preclude pain management (Hajiesmaeili & Safari, 2012). Hajiesmaeili and Safari in their study indicated that

pharmacological interventions can increase the probability of prolonged effects in ICU patients in which it causes “altered pharmacokinetic and pharmacodynamic characteristics with prolonged administration, altered protein binding, altered volume status, and end-organ dysfunction” (Hajiesmaeili & Safari, 2012, p.1). With consideration of the adverse effects of using pharmacological methods, the use of non-pharmacological interventions can propose a huge impact on pain management in critical care settings.

The United Nations and other organizations have accepted the concept of access to pain management to relieve pain as a basic human right (Brennan et al., 2019). The complications of inadequate pain management in the ICU can result in physical and psychological effects such as increased ICU stay, pain-related immune suppression, readmission for further pain management, delirium, post-traumatic stress disorder, brain injury, sleep disruption, chronic pain, and other issues, (Hajiesmaeili & Safari, 2012). The roles nurses play in the hospital can strongly influence a positive outcome and should be to provide quality patient care with pain being one of the most important aspects. Critical care nurses are responsible for providing direct and hands-on care for critically ill patients in pre-and postoperative settings through recognizing and evaluating pain. Failure to provide adequate pain management can result in long-lasting mental and physical complications. With many patients in the ICU being connected to mechanical ventilation or heavily sedated on medications, it can be difficult for nurses to help their patients manage pain.

### **Purpose Statement**

The focus of this thesis is to explore the impact of nurses using non-pharmacological and psychological interventions to help patients manage pain throughout their stay in an intensive care setting. A review of the literature will explore the topic and a proposal for further research

will be presented with the aim of examining the issue further. With non-pharmacological and psychological interventions/therapies being low-cost and minimally invasive, it can help critically ill patients experience both physical and mental support during their vulnerable stage at the hospital.

### **Research Question**

The research question for this study is: What are the impacts of using non-pharmacological interventions and psychological nursing interventions that aim to aid patients in the ICU with pain management?

### **Literature Review**

The following literature review explores recent studies, researches, and information regarding the different types of non-pharmacological and psychological nursing interventions to help patients in the intensive care unit with pain management.

The articles used for this review were retrieved from the following databases: Google Scholar, Pubmed, Wiley, Hindawi, and Iceberg. With each database, the search terms used to find each article included: *pain reduction/management*, *intensive care unit/ICU*, *non-pharmacological*, and *psychological interventions*. There were many articles that were related to the concept of pain management through non-pharmacological and psychological practice that would allow for the exploration of these nursing interventions. The criteria these articles needed had to demonstrate evidence of interventions used to help with pain management and the practices had to be non-pharmacological and/or psychological. A total of six articles were selected for this literature review and will be under the following subheadings: Patient's Memory and Recollection from ICU, Patient's and ICU Nurses' Perspective on

Nonpharmacological Interventions, and Hands-on Nonpharmacological and Psychological Interventions.

### **Patient's Memory and Recollection from ICU**

Pain is a subjective measurement given by the patient. It is imperative that nurses and healthcare providers help patients with their pain management. Pain in the intensive care unit occurs frequently due to many factors ranging from underlying disease to invasive surgeries. Per standard protocol, analgesics are usually given to help with pain but sometimes that is just not enough. Many patients have recollections that illustrate their experience with pain in the ICU.

In the article, *Patient Recollection of ICU Procedural Pain and Post ICU Burden: The Memory Study* was written by Puntillo and her team conducted a prospective longitudinal study of patients who have gone through ICU procedure. They wanted to explore the patient's memory of the pain in the ICU and the lasting impact post-hospital stay. All two hundred thirty-six patients were asked to 1) recollect and rate their procedural pain distress as well as intensity on a numeric rating scale; 2) current pain in the past week that didn't exist prior to hospitalization; and 3) any signs of traumatic symptoms (Puntillo et al., 2016). The main result when comparing patients with and without current pain showed that patients with current pain recalled even higher ICU procedural pain intensity and pain distress scores than patients without current pain (Puntillo et al., 2016). Although some patients were not able to recall the procedure-associated pain, there were those who were able to recall pain intensity and pain distress and reported their pain being significantly higher in the ICU. When compared to patients who did not have current pain, one in seven patients who recalled pain remembered higher ICU procedural pain levels and higher traumatic stress. (Puntillo et al., 2016).

Similarly, in *Patient's Memory and Psychological Distress after ICU stay compared with Expectations of the Relatives*, Myhren and her team compared “patient’s psychological distress and memories from intensive care unit treatment 4-6 weeks after ICU discharge with expectations of their relatives” (Myhren et al., 2009, p.1). In the cross-sectional study performed on 255 patients and 298 relatives, there were questions ranging from “hospital anxiety and depression scale (HADS), impact of event scale (IES), life orientation test, ICU memory tool and memory of ICU; technical procedures, pain, lack of control and inability to express needs” and the “relatives were assessed for their expectations of the patients’ memories and psychological distress” (Myhren et al., 2009, p.1). With the results collected from the survey, it was concluded that psychological distress symptoms were highly frequent in the ICU setting and the patient’s relatives expected their critically ill family members to be more distressed. It was also stated in the article that “the strongest predictors of posttraumatic stress symptoms from the ICU were memories about pain, lack of control and inability to express needs” (Myhren et al., 2009, p.1).

With the summary of both articles, patients, as well as their family members, recall some degree of pain during and after ICU encounters. The lasting repercussions of pain memory greatly affect the patient’s perceptions of their stay in the ICU, resulting in potentially intensified symptoms. It is clear that pain management among critically ill patients is a critical issue in healthcare settings, where it requires immediate attention to prevent lasting and traumatic memories.

### **Patient’s and ICU Nurses’ Perspective on Nonpharmacological Interventions**

The primary approach in pain management is usually pharmacological interventions. However, with recent studies, nonpharmacological approaches are starting to be incorporated in

nursing care plans. Patients, as well as nurses, are favoring or preferring nonpharmacological approaches in helping with pain management.

The article, *Nurses' Pain Assessment Practices with Critically Ill Adult Patients* by Kizza and Muliri (2015) reviewed that acute pain is a prevalent problem among critically ill patients and that nurses play a huge role in helping with pain management. With that statement, they decided to conduct a study in a resource-limited setting to examine nurses' acute pain assessment practices. Their goal for this study is to describe the barriers, enablers, and acute pain assessment nurses used to care for adult patients in the intensive care units (Kizza and Muliria, 2015).

A descriptive and cross-sectional design was used on 170 nurses. They handed out questionnaires to measure the variety of aspects that affect the nurses' pain assessment for patients in the ICU. The result from this survey showed that the majority of the nurses had poor pain assessment practices with the practices being: documentation of findings, assessing analgesics needed before care, and discussing and managing pain management during nurse-to-nurse reports. With their study, they have found that the primary barriers with the nurse and their pain assessment consist of a heavy caseload; lack of proper training and familiarity with assessment instruments; and inadequate recording and communication of pain assessment priority (Kizza and Muliria, 2015). Whereas the only enabler for the pain assessment was the physician's order for analgesia. There is a need to have implementations to help reduce barriers and promote more enablers to help with patients' pain management. As Kizza and Muliria mentioned, actions must be holistic and conducted by professional healthcare workers in order to be effective. (Kizza and Muliria, 2015).

With the suggestion of approaching pain with a holistic view, nonpharmacological interventions may be an effective way to reduce pain. In the study, *Patients and ICU Nurses' Perspectives of Non-Pharmacological Interventions for Pain Management*, the authors were able to allow the voices from the nurses and patients along with their family members to describe the usefulness, relevance, and feasibility of non-pharmacological practices for pain management in the intensive care units (Gelinias et al., 2013). In the qualitative study, a total of 6 patients/family members and 32 ICU nurses were asked to share their perspectives regarding nonpharmacological interventions that they found useful for pain relief. Out of 33 nonpharmacological interventions discussed, the top four interventions that were found useful, relevant, and feasible were music therapy, distractions, massages, and family presence/support.

With many barriers and unprecedented issues arising in the intensive care units, it may be difficult for patients to express their needs and for the nurses to assess the levels of pain. The hardship of analyzing a patient's pain can decrease the quality of care that nurses are expected to give. Further training and better familiarity can increase proper pain management. With non-invasive, safe, and low-cost nonpharmacological interventions, can complement pharmacological treatment and help maximize pain relief among critically ill patients.

### **Hands-on Nonpharmacological and Psychological Interventions**

With music therapy, massages, and family presence being three of the top four most favored interventions voted by both patients and ICU nurses, we will explore them and their effectiveness. In the article, *Music for Pain Relief During Bed Bathing of Mechanically Ventilated Patients: A Pilot Study*, Jacq, and her team conducted a study between March 2013 and October 2015. Their motivation in creating this study was acknowledging that pain is a

universal issue particularly among mechanically ventilated patients in the intensive care setting due to their inability to communicate verbally (Jacq et al., 2018). With this ongoing issue, their aim for this study was to assess the effectiveness of music therapy against pain in mechanically ventilated patients during their morning bed bath (Jacq et al., 2018). The study consisted of 60 patients where 30 of them received no music while the other 30 received music therapy during their bath. The method used to measure pain was through the Behavior Pain Scale (BPS) which was scored during and at the end of the bath, then 30, 60, and 120 minutes post-bath (Jacq et al., 2018). The results highlighted that at baseline, no patients had pain. However post-bath, 88% of the patients indicated pain occurrence, where the maximum BPS value during the bath was lower in the group with musical therapy than in the control group with no music at all. The results also indicated that in all 30, 60, and 120 minutes after bath time, it was found that the maximum BPS was also significantly lower in the music group compared to those with no music. It was concluded that music therapy showed significant effectiveness in decreasing pain intensity and duration during the bed bath in critically ill patients (Jacq et al., 2018).

Alike in *The Effect of Foot Massage on Pain of the Intensive Care Patients: A Parallel Randomized Single-Blind Controlled Trial* is written by Momeni and her team, found evidence in the effectiveness of massages to decrease pain. The aim of the study was to compare the effectiveness of foot massage by a nurse or patient's family on the pain of the critically ill patient. Using a randomized, parallel, single-blind controlled trial study, 75 critically ill patients were put into three groups: massage by a nurse, patient's family, and a controlled group with no massages. Massages were given to the experimental group once a day for six days and the pain was documented before, immediately, and one-week post-massages. The results showed that the

experimental group who received massages by either nurses or family members had significantly lower pain scores than the control group. It was concluded that hands-on interventions such as massages may increase the quality of nursing care in the ICU setting.

With recent practices, light sedatives have been increasingly taken due to the negative effects of deep depressants such as stress, delirium, long stays, and increased infections, nonpharmacological have been widely regarded as complementing standard treatments (Momeni et al., 2020). Massages and music therapy have shown significant indications of relieving pain post-implementation in critically ill patients. Evidence obtained from trials and studies proves the effectiveness and support for nonpharmacological interventions.

### **Overall Discussion of the Literature**

The review of the literature demonstrated and acknowledged the concerns and perspectives of both ICU nurses and patients as well as evidence that shows reduction of pain using nonpharmacological/psychological interventions among critically ill patients. The literature review suggests that applying nonpharmacological interventions is one of the most effective forms of acute pain reduction in the ICU. Music therapy, massages, and having family members involved were found to be effective in pain management in the literature. Although there are many other possible nonpharmacological and psychological interventions that can help with the reduction of pain, there need to be more studies to warrant further assessments. Nurses must incorporate a holistic approach rather than solely pharmacological interventions to provide effective pain management.

## **Proposal For Further Study**

### **Overall Research Question**

With the six articles discussed in the literature review, nonpharmacological nursing interventions were shown to be effective in aiding patients with acute pain management in the intensive care setting. With this new understanding of interventions that can be effective in acute pain, a further study will be proposed to answer the research question: Will nonpharmacological and psychological interventions be as effective for aiding in chronic pain management in a non-hospital setting?

### **The Rationale for Proposed Study**

With medical interventions used in most intensive care settings such as patients needing to be on ventilation and other implementations, obtaining and conducting pain assessment can be difficult which increases the possibility of untreated pain turning into chronic pain (King and Fraser, 2013). With the literature displaying the effectiveness of nonpharmacological and psychological interventions being effective in pain management in the hospital setting, this proposed study may further explore the effectiveness of interventions such as massages and music therapy that can be used by families or non-licensed personnel to help patients cope with chronic pain in a setting as comfortable as the individual's own home.

### **Theoretical Framework**

The theoretical framework used to support this proposed research study is known as Kolcaba's Theory of Comfort. This theory was first developed in the 1990s with the purpose of placing comfort in the frontline and the immediate desirable outcome of nursing care in a healthcare setting (Petiprin, 2020). Kolcaba emphasized that the holistic nursing approach plays

a huge role in creating and providing comfort to the patients. According to Kolcaba, there are three forms of comfort: relief, ease, and transcendence (Petiprin, 2020). Examples given by Kolcaba regarding the three forms of comfort include: relief happening after the specific comfort needs of a patient are addressed, ease transpiring in a state of contentment, and transcendence occurring when patients are able to rise above their discomfort issues (Petiprin, 2020). Kolcaba also claimed that there are four different contexts of comfort: physical, psychospiritual, environmental, and sociocultural. It is important to acknowledge the three forms and four contexts of comfort as it helps guide nurses to recognize each patient as an individual, family, institution, or community in need of health care and not just a patient (Petiprin, 2020).

The Theory of Comfort's model focuses on implementing an effective nursing care plan which includes assessment, development, interventions, and evaluation of the patient's level of comfort and overall outcome. Having this theory is essential in supporting the proposed study as the main focus is to help the patients manage their pain levels. Kolcaba in her theory supports the holistic care approach which is the main objective of using nonpharmacological and psychological interventions.

### **Primary Research Aims**

The goal of this primary research is to identify the effectiveness of managing pain on a long-term basis using approaches that can be implemented at any given time without the need for invasive techniques or for a doctor's order. Specific questions to be answered are:

- Are massage and music therapy interventions effective in reducing pain for patients dealing with chronic pain compared to a period of quiet relaxation?

- Is there enough evidence to support massage and music therapy interventions aiding in pain management and should this be incorporated into patient education during discharge?

### **Ethical Considerations**

Conducting a research study specifically about chronic conditions often requires a history from the participants. It may require access to a patient's private health information, such as a diagnosis or medication list. Collecting personally identifiable data can create potential issues related to confidentiality. One way to protect the participants is to guarantee confidentiality by keeping the participant's identifiable information hidden from everyone else, assigning study IDs instead of using names, and anonymizing to minimize the possibility of the data being linked to participants. This study will need to be reviewed and approved by an internal review board. Participants will need to provide their informed consent.

### **Research Methods**

#### **Research Design**

To effectively carry out this research study, the proposal of using a quasi-experimental quantitative research study will be implemented. Participants will be randomly assigned to either an experimental or control group.

#### **Population**

The population of this study will include those who experience chronic pain levels who live in the San Francisco Bay Area. The intensity of pain can vary as long as the pain is chronic, i.e. lasting for more than 6 months. The population to be studied will be limited to be adults, aged 18 and older.

**Sample Size**

The proposed sample size will be at least 30 participants. Fifteen of the participants will be randomly chosen to be in the control group and fill out a survey rating their pain levels. The other 15 will also fill out the survey but will also receive the interventions (massage and music) for one month.

**Strategy of Recruitment**

Some proposed strategies to recruit participants will be to market the study through social media, newspapers, and flyers in pain management clinics located in seven counties surrounding San Francisco Bay. Potential participants will be instructed to call the research by phone. We, the researchers, will ask screening questions, including age, level of pain, and if they have been experiencing this pain for six months or longer. There will be incentives such as a gift card to help with recruitment as well as flexibility given to the participants. The nonpharmacological interventions can be conducted by the participants in their free time at home.

**Methodology**

After having the study explained and giving informed consent, participants will fill out a questionnaire asking about demographics (such as gender identity, ethnicity, and income level), as well as questions about their pain (location, type, timing, alleviating factors, and exacerbating circumstances) and medical diagnosis. Participants will be assigned numbers for Study IDs and categorized into control or experimental group, using a computer randomization program.

We will partner with seven massage therapy practices (one in each county: Marin, San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, and Solano) that travel to provide their services in people's homes. Participants in the control group will be invited to take an

opportunity to rest or partake in another relaxing activity in a quiet environment without music at home three times per week (Monday, Wednesday, and Friday) for a period of one month. The intervention group will receive the interventions of a one-hour massage with relaxing music in their homes three times per week (Monday, Wednesday, and Friday) for one month. Right after each massage or relaxation period, three times each week for a total of 12 times over one month, all participants, the control and experimental group will fill out a survey using a Likert scale to rate their experience and pain levels on a scale of 0-10.

### **Statistical Methods for Quantitative Research**

After the data is collected, the results from the survey will be examined in detail to determine the effectiveness of nonpharmacological/psychological interventions. Data from the participants in the experimental group who received massage and music therapy will be compared to the data from the control group to examine the possibility of a relationship between the nonpharmacological interventions of massage and music and pain reduction. To help ensure that the control group does not use the experimental interventions during the study, we will request that they do not get a massage during the month, however, we can provide them with a gift card for a massage accompanied by relaxing music at the end of the study. No further context will be given to the control group.

After data collection, descriptive statistics will be used to assess the demographic data and information about patients' diagnoses. The results of the weekly surveys will be further reviewed using an Analysis of Variance (ANOVA) and a Chi-square test, a statistical tool used to compare the participants' subjective and objective responses to the nonpharmacological interventions. Data will also be examined over time to determine whether there could be a

cumulative effect of the massage with music therapy. After examining the results, the researchers may have a new and improved understanding of the effectiveness or ineffectiveness of using massages and music therapy to help with pain management.

### **Conclusion**

It was acknowledged that both sides of the care relationship between the nurses and patients recognize that pain is highly prevalent in the intensive care setting. With findings showing evidence of substandard pain assessment from nurses to patients reported post-traumatic stress symptoms from the lasting memories of pain, both consciously and physically, studies were discussed in this paper to find evidence that help patients reduce pain levels using nonpharmacological interventions. In one of the studies discussed, it was concluded that massages and music therapy were among two of the most popular implementations used on patients. These therapies had shown signs of pain reduction during the patient's stay in the ICU.

With the evidence-based practices applied, these current studies have found confirmation indicating the effectiveness of psychological interventions in pain management. Medical personnel can implement noninvasive techniques on their patients to help make their stay at the hospital more comforting acutely, which may help reduce any future symptoms of post-traumatic stress.

As stated in the literature, the proposed study of continuing to treat chronic pain can play a significant role in educating patients with chronic pain. Applying nonpharmacological interventions can allow the patient to find ways to reduce pain levels without having to visit their doctors for a prescription or spending more time and money on medications. Psychological

interventions are a great way to address the pain instead of temporarily masking the pain with pharmacological treatments.

To fully grasp the understanding of treating pain with nonpharmacological techniques and other non-invasive treatments, it is vital for more studies to be conducted. The studies discussed in this paper showed evidence of pain reduction on a short-term basis, but knowing the last effects of psychological methods such as massages or music therapies will allow those who utilize these interventions to know the full advantages or disadvantages of nonpharmacological techniques.

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## Appendix A

Investigator	Purpose	N	Sample	Design	Major Finding	Strengths	Weaknesses
Gélinas, C., Arbour, C., Michaud, C., Robar, L., & Côté, J. (2013). Patients and ICU nurses' perspectives of non-pharmacolog ical interventions for pain management. <i>Nursing in critical care</i> , 18(6), 307–318. <a href="https://doi.org/10.1111/j.1478-5153.2012.00531.x">https://doi.org/10.1111/j.1478-5153.2012.00531.x</a>	To recognize the patient's, family members', and ICU nurses' viewpoints about the effectiveness of non-pharmaco logical interventions to help with pain management in the ICU.	38	ICU nurses (n = 32) and patients/family members (n = 6) with prior ICU hospitalization experience were recruited.  8 focus groups.	A qualitative descriptive design was used.	The top four non-pharmacological interventions consist of music therapy, distractions, simple massage, and family presence/support.  Patients were inclined toward more undivided attention/reality orientation, while nurses spoke for the most part about positioning and teaching.	The study opens up opportunities for ICU nurses to use non-pharmacologic al interventions to treat pain since they are low-cost and safe. 33 non-pharmacologic al interventions were discussed in this study.	Not enough evidence to prove effectiveness.
Momeni, M., Arab, M., Dehghan, M., & Ahmadinejad, M. (2020). The Effect of Foot Massage on Pain of the Intensive Care Patients: A	To determine the impact and effectiveness of foot massage in aiding pain with critically ill patients.	75	Critically ill patients, and their families.  There were a total of three groups: massage by a nurse, massage	A randomized, parallel, single-blind controlled trial study was performed on 75 ICU patients.	The result from the research showed a reduction (from 4.48 to 3.36 and 4.76 to 2.96, respectively).	Results showed evidence that foot massages given by nurses or family members can reduce the pain of ICU patients.  Massages/hands-o	The study found that there was not a huge difference in pain level among the experimental and control group one week after the intervention.

<p>Parallel Randomized Single-Blind Controlled Trial. <i>Evidence-based complementary and alternative medicine : eCAM</i>, 2020, 3450853. <a href="https://doi.org/10.1155/2020/3450853">https://doi.org/10.1155/2020/3450853</a></p>			<p>by the patient's family, and a control group.</p>			<p>n interventions may improve the quality of care in the nursing field and it is cost-effective with little to no complications.</p>	
<p>Puntillo, K. A., Max, A., Chaize, M., Chanques, G., &amp; Azoulay, E. (2016). Patient Recollection of ICU Procedural Pain and Post ICU Burden: The Memory Study. <i>Critical care medicine</i>, 44(11), 1988–1995. <a href="https://doi.org/10.1097/CCM.0000000000001875">https://doi.org/10.1097/CCM.0000000000001875</a></p>	<p>To assess a patient's memory of ICU pain from procedural implementations and its lasting impact post-ICU.</p>	<p>236</p>	<p>Patients who underwent ICU procedures.  The set consists of 24 ICUs in France and Belgium.</p>	<p>A prospective longitudinal study.</p>	<p>14% of the patient-reported current pain.  When contrasting patients with and without current pain, patients with current pain recalled a greater ICU procedural pain intensity and distress scores than patients without current pain.</p>	<p>The range of the interview was 3-16 months after hospitalization. 3 months is great for recalling memory accurately due to the ICU being recent. However, 16 months seems a bit long.</p>	<p>Asking participants to recall their ICU stay 16 months after.</p>
<p>Myhren, H., Tøien, K.,</p>	<p>To compare and contrast</p>	<p>553</p>	<p>A total of 553 participants</p>	<p>A cross-sectional</p>	<p>25% of patients reported severe</p>	<p>The sample size is great.</p>	<p>The article indicated that there</p>

<p>Ekeberg, O., Karlsson, S., Sandvik, L., &amp; Stokland, O. (2009). Patients' memory and psychological distress after ICU stay compared with expectations of the relatives. <i>Intensive care medicine</i>, 35(12), 2078–2086. <a href="https://doi.org/10.1007/s00134-009-1614-1">https://doi.org/10.1007/s00134-009-1614-1</a></p>	<p>the patient's memories and psychological distress from their stay at the ICU with the expectations from their family members.</p>		<p>with 255 being patients and 298 being relatives.</p>	<p>study.</p>	<p>post-traumatic stress symptoms.  Their levels of anxiety and depression were significantly high.  Relatives of the patients expected more psychological distress.  Strong indicators of severe posttraumatic stress symptoms include memories of pain, lack of control, and inability to express needs in the ICU.</p>	<p>Gave readers the perspectives of both the patient and their relatives.</p>	<p>may be other factors that play a role in causing psychological distress such as pessimistic patients. This warrants further studies on the topic of psychological distress.</p>
<p>Kizza, I. B., &amp; Muliira, J. K. (2015). Nurses' pain assessment practices with critically ill adult patients. <i>International nursing review</i>, 62(4), 573–582.</p>	<p>To describe barriers, enablers, and acute pain assessment practices used by nurses in the intensive care setting.</p>	<p>170</p>	<p>A total of 170 nurses.  The setting was in Ugandan.</p>	<p>A descriptive and cross-sectional design.</p>	<p>Most of the nurses in this study showed evidence of poor pain assessment practices.  The main barriers to assessing pain included: heavy workload, lack of</p>	<p>Demonstrated that pain assessment practices were an issue among critically ill adults.  Suggested holistic interventions to help reduce barriers and</p>	<p>Only sourced one hospital. Different hospitals may have different factors (ie. some hospitals may have light workloads for nurses).</p>

<p><a href="https://doi.org/10.1111/inr.12218">https://doi.org/10.1111/inr.12218</a></p>					<p>proper education and familiarity with the assessment tools, poor documentation, and communication of pain assessment priorities.</p> <p>Poor pain assessment was associated with the amount of workload.</p>	<p>enhance enables to help with pain management.</p>	
<p>Jacq, Gwenaëlle, et al. "Music for pain relief during bed bathing of mechanically ventilated patients: A pilot study." <i>PloS one</i> vol. 13,11 e0207174. 14 Nov. 2018, doi:10.1371/journal.pone.0207174</p>	<p>To assess the effectiveness of music therapy on pain with mechanically ventilated patients during bed bathing.</p>	<p>60</p>	<p>Total of 60 mechanically ventilated patients with 30 patients getting music therapy and 30 patients receiving no music therapy.</p>	<p>True experimental design.</p>	<p>The baseline for all patients was no pain.</p> <p>After bed bathing, 88% of patients experienced pain. The experimental group that had music therapy reported significantly lower pain values than the control group with no music therapy.</p>	<p>The study showed the baseline for all patients, had control and experimental groups, and compared and contrasted the two groups.</p>	<p>The sample size could be larger.</p> <p>Results warrant further assessment and evaluation in a larger multicentered randomized controlled trial.</p>