

2015-5

# Advancements of Nursing Roles in Pediatric Burn Care

Stephanie Scherrer

Follow this and additional works at: [https://digitalcommons.salemstate.edu/honors\\_theses](https://digitalcommons.salemstate.edu/honors_theses)



Part of the [Pediatric Nursing Commons](#)

---

## Recommended Citation

Scherrer, Stephanie, "Advancements of Nursing Roles in Pediatric Burn Care" (2015). *Honors Theses*. 55.  
[https://digitalcommons.salemstate.edu/honors\\_theses/55](https://digitalcommons.salemstate.edu/honors_theses/55)

This Thesis is brought to you for free and open access by the Student Scholarship at Digital Commons at Salem State University. It has been accepted for inclusion in Honors Theses by an authorized administrator of Digital Commons at Salem State University.

ADVANCEMENTS OF NURSING ROLES IN PEDIATRIC BURN CARE

Honors Thesis

Presented in Partial Fulfillment of the Requirements

For the Degree of Bachelor of Nursing

In the College of Health and Human Services

at Salem State University

By  
Stephanie Scherrer

Dr. Robin R. Leger  
Faculty Advisor  
Department of Nursing

\*\*\*

The Honors Program

Salem State University

2015

## Acknowledgements

First and foremost I would like to thank my family, especially my parents. You have supported me my entire life and have encouraged me to take whatever avenue in life that I wished knowing that I would be able to obtain whatever it is that I wanted. Thank you for the countless times that you have dealt with my stress and answered with nothing but reassurance. To my grandfather, thank you for always offering words of encouragement and helping me to know that I could complete anything I set my mind to.

Thank you to all my nursing friends, we have made it through school together and because of one another. No one can quite understand that type of stress than one another. And of course, to Christopher, thank you for being there for me reminding me of the future that all of this is for.

Last but not least, thank you to my advisor, Robin Leger, RN, MS, PhD, for encouraging me to research a topic that I had passion for but also for offering her knowledge, expertise and guidance throughout this entire process. I would not have been able to foreseen the end goal that is this complete project with you. Thanks to her expertise and advice I now have the tools to turn ideas into solid research throughout my entire nursing career.

TABLE OF CONTENTS

Abstract and Key Words	1
Introduction.....	2
Review of the Literature.....	5
Conclusion.....	19
Recommendations for Practice and Advanced Research.....	20
References.....	21

## **Abstract**

**Background and Abstract:** Burns are a common injury for children, especially in toddlers and adolescents. Children at risk for burns which is related to their curiosity and their developmental state with can manifest in lack of thinking of consequences of actions as well as the fact that children can be victims of neglect or abuse. Nurses are the frontline of care and possess many roles within the care of pediatric burn patients. Nursing roles in pediatric burn care can be organized into three major areas of care including acute, rehabilitative and psychological It is the roles that nurses carry out that make a difference in the long term quality of life in the pediatric burn patient.

**Goals and Objectives:** To address nursing roles in all three major areas of nursing care in pediatric burn care, acute care, rehabilitation care, psychosocial care, long term care and follow up care.

## **Key Words and Definitions**

TBSA: total body surface area that is burned

Pediatric burn patient: patients from infancy until 18 years old who have sought medical treatment for their burns

Severe burns: 5% TBSA or over in children under 2 years, 10% TBSA or over in children under 10 years, 15% TBSA or over in children over 15 years old (Lipovy, 2011).

Nursing role: role that a register nurse or advanced practice nurse may take on while caring for a patient

Nursing competencies: Roles, tasks and assessments that the registered nurse is proficient in enough to perform while caring for patients

## **The Advancements of Nursing Roles in Pediatric Burn Care**

### **Introduction**

#### Purpose:

Burns continue to affect children and their long term health needs in developed and underdeveloped countries. In today's health care system, nurses have a variety of roles to provide care for pediatric burn patients. The purpose of this paper is to take a closer look at the advancement of nursing roles in the care of pediatric patients (infants to age 18) for severe burns. The type of patient will be considered for the purpose of this paper will be patients that had burns that not only warranted treatment but also patients themselves, or guardians, sought treatment for that burn. There are many avenues burn care must take to be holistic care for the patient. This ranges from the frontline clinical management of the physical burn, prevention or treatment of dehydration and mobility limitations, to long term rehabilitation and psychological components of burns. Long term follow up by nurses with the pediatric burn patient is essential for that patient. Due to this follow up, nursing competencies are essential in much of the avenues of treatment for the pediatric burn patient's long term care.

#### Background and Significance:

According to the Center for Disease Control and Prevention (CDC), the leading cause of death from the age of one years to 24 years is unintentional injury. This has an exception of those patients under one year old which unintentional injury was the fifth leading cause of death, the leading being congenital abnormalities. According to the CDC Childhood Injury Report, males have a two times higher death rate from injuries than their female counterparts (Borse, Gilchrist, Dellinger, Rudd, Ballesteros & Sleet, 2008). Burns are the third leading cause of accidental death in children (Peoples, 2005). Death from burns peak in the ages from one to four years (Borse, et

al., 2008). Many families that seek treatment for their child's burn are admitted through the emergency room, but the care that they receive only starts there. There are many environments in which the nurse can care for and benefit the pediatric burn patient, including the emergency department, the acute care setting, the rehabilitation setting, specialty care clinics, the primary care setting, homes and schools. This means that nurses in varying work settings should be aware of nursing roles and competencies for pediatric burn care to provide the highest quality care.

### **Review of the Literature**

#### Pediatric Nursing

The pediatric field of health care has a different landscape than that of adult. Because of these differences, the nurse's role is patient and family-centered. In pursuit of holistic care, the nurse needs to take in the entire picture that entails pediatric nursing. The field of pediatrics is currently changing, as is the entire field of nursing. This change is due to the evidence based practice becoming more and more integrated into the field (Christian, 2014) and the Affordable Care Act's promotion of patient centered home. Nursing in the pediatric field has more considerations than other fields of nursing due to the attention needed paid to the family unit. In pediatrics, the pediatric patient is the one cared for but the family unit in entirety is also cared for. Nursing in the pediatric field needs to pay special consideration to this and acknowledge this in every part of the plan of care. This is especially true in regards to culture. Care plans and care itself for the pediatric patient must fit into and respect cultural considerations for the entire family. In pediatric burn care in particular, the family can be in crisis due to the injury to a child within their family unit. The nursing field will need to work with the family and their community unit to care for the pediatric burn patient.

#### The New Classification System of Burns

The classification of burns has recently taken a turn from the traditional system, which including the designations of first degree, second degree and third degree burns, to the new system which better describes burns by the interventions and treatment of that burn (Bhananker, Krishnamoorthy & Ramaiah, 2012). The new system of classification includes which areas of the skin that are affected with each classification, each clinical presentation and a general outline of the treatment plan that may be followed, meaning the possibility of surgery in most cases (Table 1). Initial assessment of a burn includes both an estimate of depth of the burn and an estimate of how large the burn is in comparison to the patient's body, or total body surface area (TBSA) (Bhananker, et al., 2012). A way to estimate the measure of the TBSA burned is the Rule of 9's. The Rule of 9's assigns percentages of TBSA based on body parts. In adults, the percentages are as follows: 9% head, 18% front trunk, 18% back trunk, 9% for each arm, 18% for each leg and 1% for the groin (UW Medicine). These percentages are slightly different in a child and are as follows: 18% head, 18% front trunk, 18% back trunk, 9% each arm, 14% each leg (UW Medicine). This is a fast and fairly accurate method to estimate TBSA in burns.



Table 1: *Classifications of Burns*

Classification of burns	Areas affected	Clinical presentation	Treatment
Superficial thickness	Only epidermis, no dermis	Redness with erythema, dry pink-red, blanchable, may or may not have edema, no blistering, delayed pain	May heal on own
Superficial partial-thickness	Entire epidermis, papillary dermis	Moist, redness that blanches, edema, blistering, pain	Requires treatment, possibility of surgery
Deep partial-thickness	Entire epidermis, papillary and reticular dermis	Variable color including white and red, blanchable, more edema, broken blisters, feelings of pressure	Usually treated with surgery
Full thickness	Entire epidermis, entire dermis, subcutaneous tissue	Dry, leathery appearance, black or white skin nonblanching, more edema, no sensation	Always requires surgical excision and grafting
Fourth-degree burn	Epidermis, dermis, fascia, muscle and sometimes bones	Dry, leathery appearance, black or white skin nonblanching, muscle loss, possible bone loss	Always requires surgical excision and grafting

Adapted from (Eslinger, 2013) and (Bhananker, et al., 2012)

### Origins of burns

There is an importance to know the different types of origins of burns. Knowing the origins is especially helpful in the cases of chemical burns due to the fact that knowing the substance can be pertinent to treatment. Knowing the origins is also helpful in identifying particular cases of neglect or abuse by burn like the “stocking burn” or the “glove burn” (Table 2).

Table 2: *Origin and Types of burns*

Type of burn	Origin of burn
Scald	Hot liquids <ul style="list-style-type: none"> <li>- Immersion</li> <li>- Stocking, glove and jackknife burns indicate abuse</li> <li>- Spill: common injury with food</li> <li>- Splash</li> </ul>
Flame	Contact with fire or flash fire
Chemical	Acidic substance Alkaline substance Irritant gas <ul style="list-style-type: none"> <li>- Including inhalation burns</li> </ul>
Radiation	Sunburn Medical tests like x-ray Nuclear emission/explosion
Contact	Contact with hot solid objects
Electrical	Contact with exposed wiring or appliances
Cold exposure	Exposure to cold element: wind, elements

Adapted from (Eslinger, 2013)

### How burns occur in children

The nature and the developmental stages of children are associated risks for injuries includes burns. The majority of burns happen before the age of five years (Bhananker, et al., 2012). There are two factors that make this age group vulnerable to burns. The first is their developmental stage, psychomotor skills and judgment. Three year olds to five year olds, or preschoolers, are in the Eriksonian Stage of Development of “initiation versus guilt” (Erikson, 1959). In the “initiation versus guilt” stage preschoolers exert power over their environment. Exploratory behavior in young children lead to their higher risk for burns (Lipovy, 2011). While they are exploring their surroundings, preschoolers are in part putting themselves in danger of their surroundings. Danger in their surroundings are a risk for burns, for example: spilling hot

soup from a counter too tall for them to see or touching a curling iron they saw an adult use. There are many different ways that exploring the environment in younger years can expose children to the potential of burns. The caretaker danger can manifest itself in two ways: neglect or abuse. Burns that resulted from abuse typically occur before the child is 10 years old with the majority before two years old (U.S. Department of Justice). Due to the fact that the majority of these victims cannot speak for themselves, part of that responsibility falls to the nurse to identify and advocate. These burns and their specific presentation will be outlined later.

The other age group in children that are especially prone to burns due to their stage of development are 12 to 18 year olds, or adolescents. Adolescents are in the Eriksonian stage of identity versus role confusion. The major challenge in this stage is social relationships and peer acceptance. The adolescent brain is not fully matured and still varies from the adult brain in key aspects, particularly in keeping impulsivities and emotional responses in check (NIMH 2011). The impulsivity of adolescents and the need to be accepted by peers can lead to a risk of injury and burns. Children within this stage of development can be risk takers and the risks that are taken can lead injuries including burns. Burns that are acquired during this age of risk taking commonly occur from motor vehicle accidents, risk taking with fire and electrical burns.

## **Nursing Roles**

### **Acute Phase**

The acute phase starts as soon as the first assessment and treatment for the patient is initiated. There are times that the first line in the Emergency Department will be the nurse and therefore the first person to see the burn patient might very well be a registered nurse. Nurses are essential in the fast and accurate treatment of the burn patient. The first role of the acute phase must be the stabilization of the patient. Burns can affect a multitude of systems which vary based

on the type of burn that occurred, how it occurred, where the burn is located and the severity of the burn. As in the ABCs of safety, which stand for airway, breathing circulation; airway stabilization is the first priority. Another key of stabilization is fluid management which in burn patients is based on the size of the burn in comparison to the total area of the body; the need for intravenous access is essential. As pain is widely undertreated in pediatric patients as will be outlined, medications for pain management of the initial burn is included in acute care. A factor in this is the nurse's ability to accurately detect pain in pediatric patients to therefore be able to accurately treat and monitor a pediatric burn patient's pain.

#### Acute Phase Nursing Roles:

##### **Stabilization**

- Airway
  - Initial management of a burn is focused on the airway, more specifically securing an airway that could possibly be or become edematous (Bhananker, 2012).
- Multi-organ: Health care providers must be aware of the systemic effects burns have on the body. This is important to foresee what possible complications may arise and what interventions may be necessary.
  - Inflammatory: SIRS- systemic inflammatory release syndrome which promotes a loss of protein and edema (Bhananker, 2012)
  - Metabolic: hypermetabolic state (Bhananker, 2012)
  - Cardiac: myocardial depression and hypotension (Bhananker, 2012)
  - Gastrointestinal: bacterial translocation which could lead to sepsis (Bhananker, 2012)

- Renal and hepatic: dysfunction due to decreased perfusion
- Fluid management
  - The Parkland method can be used for fluid resuscitation which is 4ml of Ringer's Lactate/kg/percent BSA burned, the first half to be given in the first eight hours and the second half given in the next sixteen hours (Bhananker, 2012).

### **Assessment**

- Origin
  - Detailed patient history including previous accidents and psychosocial comorbidities
- Wounds
  - TBSA- Total body surface area can be calculated by the rule of 9's. Explained previously, the rules of 9's assigns different parts of the body percentages for a faster estimate of how large a burn is compared to the total body surface area.
  - Nursing staff must be able to quickly assess wounds as there are different treatment plans to anticipate based on how large the wound is.

### **Medications**

- Antimicrobial
  - The number of infections in pediatric burn patients have been lowered since the use of procedural sedation has been used (Foglia, 2004).
- Pain
  - "Burn wound pain remains insufficiently treated, despite considerable advances in burn wound management" (Brown, Kimble, Rodger, Ware, & Cuttle, 2014).

- Pain was had in the first dressing change no matter what nonpharmalogical intervention was used (Brown et al., 2014).
- Opiods are mostly used but are frequently unable to provide sufficient pain management (Brown et al., 2014).
- Nursing Roles: Due to the fact that young children are commonly not able to express their pain fully, nurses must be able to utilize other means in addition to self-reporting. These can include physical factors like raise in heart rate, blood pressure or respirations, or the use of numerous pediatric pain scales like the Hester's Poker Chip tool, the Oucher Scale, the Wong-Baker FACES scale and the Visual Analog Scale (Pollard & Stanley, 2013).

### **Rehabilitative Phase**

The rehabilitative phase can take place in a variety of different settings, this is why it is important for nurses in all of these settings to understand these roles and use them in their practice. Ranging from a specialty hospital treating pediatric burns specifically, acute inpatient and rehabilitative to primary care office visits, burn patients require extended care and may obtain that care from a variety of providers. Although dressing changes are performed in acute care, they are also a focus in rehabilitative care, and ongoing into the community. This is including in these nursing roles due to the fact that as the patients progress from acute to rehabilitative care they have been exposed to numerous dressing changes and therefore could have had trauma associated with the dressing changes. This is something that needs to be considered in both phases of care but may not be able to be a focus due to the acuity of the patient's burn in acute care. The nurse must be aware and consider all of the rehabilitative nursing roles for the care being given to holistic to the patient. Holistic care in the rehabilitative

phase includes skin care. “Nursing staff who take up the sole responsibility of skin care in burn patients” (Ho, W, et al., 2001). Because the responsibility of skin care is in the nurse’s scope a practice, it is important that the nurse pays special consideration this skin care.

Rehabilitative Phase Nursing Roles:

- Dressing change management
  - Nursing roles: Nursing staff must be aware of current interventions that are nonpharmacologic but also effective in relieving pain during dressing changes.
  - Psychosocial management and coping behaviors for pain: recent studies have shown that hand held devices that prepare and distract the patient from the dressing change have lowered perceived pain during the procedure in all but the first dressing change. (Brown et al., 2013).
- Physical therapy
  - Use of total contact orthoses: Though the fitting of total contact orthoses is not in the nurses scope of practice, because the nurse is with the patient throughout their day and night and is actively participating in their care including activities of daily living, the nurse must ensure that the patient is using their total contact orthoses and is using correctly to prevent of contractures.
  - Particular areas of concern in the growing child regarding orthoses are hands and face.
  - The rehabilitation phase will include activities of daily living, instrumental activities of daily living, self-care and life skills. These activities will differ based on the age of the pediatric burn patient and may include play.
- Skin care

- Scar care: “The role of the nursing specialist is to teach the technique and frequency of applying the lubricating cream, educate the patient as to the importance of avoiding sun exposure and the types of sunscreen that can be used, share the experience of dealing with itchiness, sebaceous cysts, ingrown hairs, and blisters, stress the potential hazards of impaired skin sensation and learn to compensate, and handle skin abrasions at home” (Ho, W, et al., 2001).
- Skin grafting: After skin grafting there will be two sites for the nurse to treat. These categories will be care of wound site, which is where the burn took place and care of the donor site which is where the skin was taken from, both of which needs care.
- Dietary considerations
  - A recent study has shown that a high carbohydrate and low fat diet is shown to help the healing process. (Lee, Gauglitz, Herndon, Hawkins, Halder, & Jeschke, 2010).
  - Nursing roles: The nursing staff must be aware of what the patient is consuming and also educate the families of what a high carbohydrate and low fat diet is.
- Collaboration on specialized teams
  - Certain burns like facial burns may require a specialized team and long term follow by that team
  - Nurses must be able to function within this pediatric cranial facial team including nurses, plastic surgeons, ENTs, and speech and language pathologists

## **Psychological Roles**



The psychological roles of nursing is not a phase by itself. Instead the psychological roles of nursing in pediatric burn care are intertwined into the acute phase, the rehabilitative phase and beyond. There are certain conditions that burn patients may experience and complications that they may encounter that the nurse must be able to recognize and advocate for the patient. These conditions and complications may present themselves in the inpatient setting like the example of posttraumatic stress from dressing changes. The conditions and complications may also present themselves in an outpatient setting like a clinic and or primary care setting like in the case of not being able to adapt to life after the burn. The psychological aspect of cultural differences and creating a care of plan that works within the culture of the family that the nurse is working with is also a key aspect in care.

Psychological Nursing Roles:

- Posttraumatic stress disorder: parent and child related to dressing changes
  - More than 50% of patients have posttraumatic stress symptoms and around half parents also show symptoms (Smith, Murray, McBride & McBride-Henry, 2011).
  - Dressing changes can cause psychological distress to the pediatric burn patient, which have reported during dressing changes “having difficulty breathing and feeling faint” (McGarry, Elliott, McDonald, Valentine, Wood, & Girdler, 2014).
  - Nursing roles: Nursing staff can encourage use of positive affirmations to ease process and use preparatory information to ease distress during procedures (McGarry et al, 2014).
  - Nursing roles: Nursing staff must utilize frequent breaks and cuddling as this helps the process of dressing changes (Smith et al 2011).

- Giving parents information prior to dressing changes can alleviate some of the stress (Smith et al 2011).
- Posttraumatic stress disorder: child related to trauma (abuse vs burn)
  - Includes acute stress symptoms (avoidance, hyperarousal and re-experiencing the event (McGarry et al, 2014).
  - “All children described feeling ‘scared’, ‘worried’ and afraid at the time of the accident” (McGarry et al, 2014). Long term follow-up by the nurse may help the child and family deal with feeling “fragile”.
- Pediatric burn patients can have issues of body image (McGarry et al, 2014).
  - Many children tend to have unrealistic expectations of healing process of scars in which the combine feelings of hope with real life expectations (McGarry et al, 2014). Nurses must be aware of this and use that information to be careful not to disturb hope of the patient but also instill real life expectations.
  - Nursing roles: Nursing staff must be aware of excessive worrying about scars to best treat patient. Due to body image patient may be susceptible to bullying (McGarry et al, 2014).
- Inability to process
  - Some patients reported guilt of stressing parents out by being injured or causing problems in family about parents taking care of them (McGarry et al, 2014).
  - Nursing roles: Nursing staff must be aware of clinical management of treatment plan to treat patient and family fully including patient’s and family’s perception of care.
- Adapting back to life outside of hospital

- Some patients reported feelings of overprotection by parents and nervousness that they might hurt themselves again (McGarry et al, 2014).
- Nursing roles: Patients also report feeling stronger because of their injury (McGarry et al, 2014). This is a feeling the nursing staff must be aware of and encourage.
- Cultural considerations
  - “Misunderstandings rooted in cultural differences often result in divided doses of antibiotics, antibiotics being replaced with faith healers, alternative or complimentary medicines with no knowledge of side effects, and not scheduling or attending follow-up visits” (Olson, 2010).
  - Nursing roles: Nurses must be aware of cultural differences and believes to provide a plan of care that the entire family can be adhered to.

### Considerations for Intentional Burns

As outlined prior, the first or one of the first medical intervention for a pediatric burn patient very well may be a nurse. The nurse in this situation should be able to identify suspicious burns that may suggest child abuse. To be able to identify suspicious burns in clinical practice, the nurse must be able to know what type of burns are of normal pattern and which are not. Common burns that are associated with child abuse are stocking burns and glove burns. Stocking burns are burns covering the feet and have a clear end line like that of a sock. Stocking burns occur from submerging the foot in hot liquid. The glove burn presents and occurs similarly but is located on the hand. Another common intentional burn in children is considered a “jackknife burn” (Lukefahr, 2008). In the “jackknife burn” the child is submerged in hot water in a jackknife position and therefore presents with a burn on the buttocks, perineum and feet.

(Lukefahr, 2008). Intentional burns may be burns other than scald. Another commonly found burns associated with child abuse are object burns. When looking for these types of burns, a nurse may find the burn to be in the shape of the object used to burn the child. The most common object used to create an object burn is a cigarette (Lukefahr, 2008). These will usually present as a circular burn the size of a cigarette which is approximately 1.1 centimeters.

### **Conclusion**

The advancements of nursing roles in pediatric burn care can be categorized into three major areas. These three major areas are acute, rehabilitative and psychological (Table 3). Within

these areas there are the nursing roles. Some of these nursing roles also can be subdivided into more specific nursing roles.

Table 3: *Summary of Nursing Roles and Environments in Pediatric Burn Care*

Major Nursing Roles and Environment	Nursing Role
Acute - Emergency department -Inpatient -Burn unit -PICU	1. Stabilization <ol style="list-style-type: none"> <li>a. Airway</li> <li>b. Multi-organ</li> <li>c. Fluid management</li> </ol> 2. Assessment <ol style="list-style-type: none"> <li>a. Wounds</li> </ol> 3. Medications <ol style="list-style-type: none"> <li>a. Antimicrobial</li> <li>b. Pain</li> </ol>
Rehabilitative -Acute inpatient -Outpatient	1. Dressing change management 2. Physical therapy 3. Skin care <ol style="list-style-type: none"> <li>a. Scar care</li> <li>b. Skin grafting: wound site</li> <li>c. Skin grafting: donor site</li> </ol> 4. Dietary considerations
Long term follow-up - Primary care -Home care - School - Camps	1. Posttraumatic stress disorder <ol style="list-style-type: none"> <li>a. Parent and child related to dressing changes</li> <li>b. Child related to trauma (abuse vs burn)</li> </ol> 2. Issues of body image 3. Inability to process 4. Adapting to life back outside the hospital 5. Cultural considerations

### **Recommendations for Practice and Advanced Research**

The nurse must be aware of the comprehensive of nursing roles in pediatric burn care to give the most holistic, evidence based care and to ensure the highest quality of care and life for

that patient. With more research into pediatric burn care the trend of higher quality care given to pediatric burn patients. Research in the quality of care in the emergency departments prior to transfer of patient to specialty care units being implemented and disseminated may increase, more units will understand the complexity of care and understand when to send the patient to specialty units instead of attempting care on their own. With implementing research more nursing staff could be more sensitive to the complications that burn patients may encounter after their burn.

Nurses who are proficient in the competencies outlined who choose this field do so knowing that is these competencies that make a difference in the of care and the quality of life for their patients. These nursing roles make the difference between morbidity, mortality, ability versus disability and the long term psychosocial effects their patients will have.

#### References

Bhananker, S., Krishnamoorthy, V., & Ramaiah, R. (2012). Pediatric burn injuries. *International Journal of Critical Illness and Injury Science*, 128-128.

Borse NN, Gilchrist J, Dellinger AM, Rudd RA, Ballesteros MF, Sleet DA. *CDC Childhood Injury Report: Patterns of Unintentional Injuries among 0 -19 Year Olds in the United States, 2000-2006*. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2008.

Brown, N. J., Kimble, R. M., Rodger, S., Ware, R. S., & Cuttle, L. (2014). Play and heal: Randomized controlled trial of Ditto[™] intervention efficacy on improving re epithelialization in pediatric burns. *Burns (03054179)*, 40(2), 204-213.  
doi:10.1016/j.burns.2013.11.024

Centers of Disease Control. (2011). 10 Leading Causes of Death by Age Group, United States 2011. Retrieved February 8, 2015, from  
[http://www.cdc.gov/injury/wisqars/pdf/leading\\_causes\\_of\\_death\\_by\\_age\\_group\\_2011\\_a.pdf](http://www.cdc.gov/injury/wisqars/pdf/leading_causes_of_death_by_age_group_2011_a.pdf)

Christian, B., (2014). Translational Research—Changing the Landscape of Pediatric Nursing. *Journal of Pediatric Nursing*. 29 (4). doi:10.1016/j.pedn.2014.05.006.

U.S. Department of Justice. (2001). Burn Injuries in Child Abuse. Retrieved January 14, 2015, from <https://www.ncjrs.gov/pdffiles/91190-6.pdf>

Erikson, Erik H. (1959) *Identity and the Life Cycle*. New York: International Universities Press.

Eslinger, A. (2013, December 2). Types of Burns: Summary of Causes and Clinical Findings. Retrieved December 30, 2014.

Ho, W., Chan, H., Ying, S., Cheng, H., & Wong, C. (2001). Skin care in burn patients: a team approach. *Burns (03054179)*, 27(5), 489-491.

- Lee, J., Gauglitz, G., Herndon, D., Hawkins, H., Halder, S., & Jeschke, M. (2010). Association Between Dietary Fat Content and Outcomes in Pediatric Burn Patients. *Journal of Surgical Research*, E83-E90.
- Lukefahr, J., (2008). Child Abuse and Neglect. *Essentials of Pediatrics*. From [http://www.utmb.edu/pedi\\_ed/CORE/Abuse/page\\_06.htm](http://www.utmb.edu/pedi_ed/CORE/Abuse/page_06.htm).
- McGarry, S., Elliott, C., McDonald, A., Valentine, J., Wood, F., & Girdler, S. (2014). Paediatric burns: From the voice of the child. *Burns (03054179)*, 40(4), 606-615.  
doi:10.1016/j.burns.2013.08.031
- NIMH. (2011) The Teen Brain: Still Under Construction. Retrieved January 14, 2015, from <http://www.nimh.nih.gov/health/publications/the-teen-brain-still-underconstruction/index.shtml>
- Olson, K. (2011). After-Care of Pediatric Burn Victims: Cultural Considerations. *Journal Of Immigrant & Minority Health*, 13(3), 415-416. doi:10.1007/s10903-009-9313-0
- Peoples, J., (2005). Pediatric Burn Care. *Stanford University Pediatric*. From [http://peds.stanford.edu/Tools/pdfs/pediatric\\_burn\\_care\\_peoples.pdf](http://peds.stanford.edu/Tools/pdfs/pediatric_burn_care_peoples.pdf)
- Phillips, K. A., & Dufresne, R. G. (2002). Body Dysmorphic Disorder: A Guide for Primary Care Physicians. *Primary Care*, 29(1), 99–vii.
- Pollard, D., & Stanley, M., (2013). Relationship Between Knowledge, Attitudes, and Self Efficacy of Nurses In the Management of Pediatric Pain. *Pediatric Nursing*. #9 (4).
- Smith, A. L., Murray, D. A., McBride, C. J., & McBride-Henry, K. (2011). A comparison of nurses' and parents' or caregivers' perceptions during pediatric burn dressing changes: an exploratory study. *Journal Of Burn Care & Research*, 32(2), 185-199.  
doi:10.1097/BCR.0b013e31820aadbdf



University of Washington School of Medicine. (n.d.). QUICK REFERENCE CARD: BURN  
STABILIZATION. Retrieved December 30, 2014, from  
<http://www.uwmedicine.org/airlift-nw/Documents/burnpocketcard-final.pdf>