American Burn Association
Educational Symposium

Transition from
Inpatient to Outpatient

Course Directors:
Lee D. Faucher, MD
Karen J. Kowalske, MD

March 20, 2007
39th Annual Meeting
Manchester Grand Hyatt
San Diego, CA
## Educational Symposium

**“Transition from Inpatient to Outpatient”**

**Tuesday, March 20**  
**8:00 am – 3:30 pm**  
Elizabeth Ballroom FG

**Course Directors:** Lee D. Faucher, MD and Karen J. Kowalske, MD

**Course Objectives:** Describe and discuss: (1) factors influencing outpatient wound care; (2) issues related to medications; (3) the impact of proper nutrition and physical and occupational therapy on outpatient progress; and (4) issues associated with returning to society after a burn injury.

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<td>Allen Holloway, MD</td>
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<td>Barbara Kammerer-Quayle, MA</td>
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Course Faculty

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Wound Care

Allen Holloway, MD and Louanne Jones, FNP
Caring for the Burn Patient in an outpatient setting upon release from the hospital can be complex and frustrating. When considering wound care and dressings in the patient transitioning from inpatient status to the outpatient setting there are many factors that need to be considered before a wound care program can be initiated, and which must be considered in the light of the patients situation. Some of these are listed here.

Current status of healing
  Are burns primarily healed?
  Does the patient have skin grafts and are they healed?
Does the patient have open wounds?
Is pain adequately controlled or to what degree can it be?
Is the patient able to go home?
  Can he do ADL’s?
  Can he do his own dressings?
Is he ambulatory?
What are the needs for OT/PT?
Are there interfering psychological needs?
Is transportation needed to obtain wound care?
Are compression garments needed?

And unfortunately the patient’s financial/insurance status can play a major part in how these decisions are made.

Once these questions are answered, what dressings we would like to use and then what dressings can actually be obtained can be addressed. Factors that need to be considered in this would include.

How large are the wound areas?
How deep are the open areas? Are they varied?
Are they well granulated or do they still have slough?
Is there evidence of infection?
Is there significant drainage?
How often do we want dressings changed?
What is the condition of the surrounding skin? Is there much scarring?

In this session we will examine how these factors will effect and, in fact, determine how we need to approach the transitioning patient, and present examples of some of the various options.
Physical Therapy

Derek O. Murray, PT and David J. Lorello, PT
Section 1: Overview of Arizona Burn Center and Rehabilitation Disposition Review

I. About Arizona Burn Center – Program and Demographics

A. Patient Admissions/ Numbers – Acute and clinic
B. Patient Make-up/characteristics
C. Average Length of Stay
D. Arizona Burn Center/MIHS Partnership
E. Staffing Resources
F. Rehabilitation roles

II. Levels of Rehabilitation: Review and Admission Criteria

A. Inpatient Acute Hospital
B. Acute Rehabilitation
C. Skilled Nursing
D. Outpatient Rehabilitation
E. Home Health Rehabilitation
F. Independence – No Rehabilitation

Section 2: Physical Therapy/Rehabilitation Management of Inpatient Transitioning

III. Where is the Patient Transitioning?

A. Home – independent no continued therapy needed
B. Home – requires continued therapy on an outpatient basis
C. Home – requires continued therapy with home health
D. Acute Rehabilitation
E. Skilled Nursing
F. Home – patient has no insurance and no ability to pay for continued therapy

IV. Evaluation at Discharge

When the patient is receiving continued care, the following information needs to be available for the therapist that will be continuing the patient’s care:

A. ROM
B. Strength
C. Current level of mobility
D. Ability to ambulate
E. Scars – use of Vancouver Scar Scale
F. Current Home Exercise Program (HEP)
G. Pressure garments
H. Splint wearing schedule
I. Pain control
V. Home Exercise Program

Regardless of where the patient is transitioning to, a HEP should be given to each patient to fill in the gaps between discharge and the beginning of therapy.

- Biggest challenge is compliance
  - Number of exercises
  - Education for both the patient and the patient’s caregiver
  - Handouts with pictures and written instructions

VI. What to do for the Patient who has no Insurance and Limited Financial Resources

Patient and caregiver need to be made aware and provided a copy of the discharge evaluation.

- Where is the patient at now and where is does the patient need to be?
- How does the patient accomplish these goals?
- What resources exist for this patient without coverage

Section 3: Managing Inpatient Transition: Program Goals and Arizona Burn Center Program Modus Operandi

VII. Ideal Transitioning Program Characteristics

A. Immediate outpatient therapy – within 1 to 3 days of discharge
B. 100% patient compliance
C. Ample clinical support with experienced burn clinicians
D. All patients eligible
E. Community partnerships
F. Community outreach
G. Multidisciplinary approach
H. Continuity of Care
I. Program Assessment and Quality Improvement

VII. Transitioning Rehabilitation (PT) Patients at the Arizona Burn Center

A. Barriers
B. Acute discharge planning
C. Mutual support with external facilities
D. Management of the uninsured burn survivor
MEDICATION MANAGEMENT
Transition From Inpatient To Outpatient

Diane M. Carlson RN, MS
Nurse Manager/Burn Unit
Stony Brook University Medical Center

Medications

• Pain
• Itching
• Constipation
• Sleep

PAIN DEFINITIONS

PAIN: “An unpleasant sensory and emotional experience associated with actual or potential damage or described in terms of such damage.” (IASP, 1979).
DEFINITIONS:

Pain is Subjective

“PAIN IS WHATEVER THE EXPERIENCING PERSON SAYS IT IS, EXISTING WHENEVER THE EXPERIENCING PERSON SAYS IT DOES”

Two Components of Pain
• Physiologic Response
• Psychological Response

TYPES OF BURN PAIN

• Background Pain - constant pain that is experienced on a 24 hour basis
• Breakthrough Pain – occurs when blood levels of pain medication fall below what is needed to control background pain
• Procedural Pain – experienced during hydrotherapy, dressing changes, ROM exercises, etc.

Types of Burn Pain

Somatic Nociceptive Pain
Normal processing of stimuli that damages normal tissues or has the potential to do so if prolonged; usually responsive to nonopioids and/or opioids
Somatic type: Arises from bone, joint, muscle, skin, or connective tissue. It is usually aching or throbbing in quality and well localized
Types of Burn Pain

Neuropathic Pain
Abnormal processing of sensory input by the peripheral or central nervous system; treatment usually includes adjuvant analgesics

Peripheral Type
Painful polyneuropathies felt along the distribution of many peripheral nerves

Goals of Therapy

• Participation in treatment plan
• Tolerable level to participate in activities of daily living

Barriers to Effective Treatment

• Patient Cooperation
• Patient Age/Developmental Age
• Depth of Burn
• Location of Burn
• Burn Size
• Socioeconomic status
• Pre-existing medical or psychological factors
Barriers to Effective Treatment

- Inadequate Assessment
- Anticipatory Anxiety
- Lack of Knowledge
- Concerns about Addiction
- Stereotyping
- Lack of Accountability

Characteristics of Burn Pain

- Multifaceted
- Pain intensity may be somewhat related to depth (full thickness considered painless)
- Burn size does not correlate with pain intensity
- Pain may intensify over time
- Continued pain in the scars and surrounding tissues following wound closure

PAIN ASSESSMENT AND MANAGEMENT

A. Ask about pain regularly. Assess pain systematically.
B. Choose pain control options appropriate for the patient, family, and setting.
C. Deliver interventions in a timely, logical and coordinated fashion.
D. Patient Education
E. Establish goal with patient and family
PAIN ASSESSMENT

- Location: Where is the pain?
- Quality: What does it feel like?
- Intensity: Use 0-10 scale.
- Duration: How long does it last?
- Aggravating Factors: What makes it worse?
- Alleviating Factors: What makes it better?
- Effects of Pain: Function, sleep, mood

Choosing the Appropriate Route

- P.O. (preferred when appropriate)
- IM/SC (least preferred)
- I.V. push (severe acute pain)
- PCA (continuous acute pain)

Inpatient Pain Management Approach

- Opiates
- Non-opioids
- Anesthetics
- Topical Anesthetics
- Regional Analgesia and Local Anesthetic Injection
- Anxiolytics
- Alternative Therapies
- Adjuvants – Anti-depressants/Neuropathic Pain Medications
Transition from Intravenous to PO

Opioids – Continuous Intravenous or PCA initially

Discharge once able to tolerate dressing changes and exercise with oral doses

PUTTING THE PIECES TOGETHER

EQUIANALGESIC CHARTS

- Equianalgesic means approximately the same pain relief — not the same dose
- The chart is a guideline. Doses and intervals should be adjusted to the individual patient’s response.
- Dosages are not necessarily starting doses. They suggest a ratio of one drug to another.
Pain Medications

- Tylenol
- Motrin
- Vicodin
- Oxycodone/APAP
- Oxycodone (IM/CR)
- Morphine CR
- Hydromorphone
- Fentanyl Patch

$ 5.00/30 tablets
$ 7.00/30 tablets
$ 0.35/tablet
$ 0.85/tablet
$ 0.30/tablet
$ 1.50/tablet
$ 0.50
$ 98.00 for bx of 5

ADJUVANTS

- TCAs
- Anticonvulsants
- Antihistamines
- Benzodiazepines
- Steroids
- Muscle Relaxants
- Clonodine

- Rehab
- Guided Imagery
- Music Therapy
- Massage Therapy
- Acupuncture
- Therapeutic Touch
- TENS Therapy

Burn Pruritus

- Persistent itching is one of the most troublesome symptoms reported by the burn patient
- Contributes to hypertrophic scar formation
- Continues for up to 18 months or longer
- Various hypothesized causes—Histamine release vs. neuropathic pain pathway
Treatment for Pruritus

- Diphenhydramine
- Doxepin Cream
- Gabapentin
- Amitriptyline
  - $5.00 per 24 tablets
  - $45 for 45 gm
  - $0.60 per 100 mg cap

Non-Pharmacologic Approaches

- Skin moisturizers
- Compression garments
- Liquid colloidal oatmeal and cool baths
- Massage therapy

Causes of Constipation

- Advanced age
- Immobility
- Abdominal disease
- Concurrent medications
- Opioids delay gastric emptying, slow bowel motility, decrease peristalsis
- Untreated constipation can lead to: ileus, fecal impaction or obstruction
Prevention of Constipation

- Laxatives (esp. if taking ATC opioids)
- Combination of stool softener (Colace) and mild peristaltic stimulant (Senekot-S)
- High fiber diet (work with nutritional services)
- Fruit Juices
- Exercise
- Provision of privacy and convenience for patients

Outpatient Medications for Constipation

- Colace
- Senna
- Dulcolax
- Milk of Magnesia
- Lactulose
-Magnesium Citrate

Sleep Disturbances with Burn Injury:
A frequent but overlooked complication

- Causes:
  - Pathophysiological response to the burn injury
  - Pain
  - Pruritus
  - Anxiety
  - Medications
  - Sleep Apnea
  - ICU environment
  - Post traumatic stress disorder
Treatment for Sleep Disturbances

- Pharmacologic
  - Ambien, Benadryl, Benzodiazepines
- Alternative Therapies
  - Decrease Noise Level
  - Modulate Room Temperature
  - Decrease Lighting

In Closing

Comprehensive management of the burn injured patient requires a multidisciplinary approach

PAIN IS HARMFUL

Physically
Psychologically
Socially
“Disease can destroy the body, but pain can destroy the soul”

Edwin L. Lisson
Occupational Therapy

Dana Y. Nakamura, OT
Functional outcome is the ultimate measure of the effectiveness of burn therapy. We assist the burn survivor to return to society in such condition that s/he can function in daily life, including work, school, recreational and social activities. Function is defined as independence in activities of daily living and mobility, as well as psychological and social performances. A successful treatment plan includes an integrated team approach, shared expectation, well designed treatment protocols, realistic and mutually agreed upon goals, good communication and mutual respect between all members of the team to achieve optimal function.

Patient and Family-Centered Care

Patients and their family are critical members of the Burn team. A study by Berwick and Kotagal (2004) found that the family serves as a helpful support structure and family visits tend to soothe the patient. Family presence, especially in the ICU, increases opportunities for education, and facilitates communication and better working relationships as the family can provide more effective feedback than the patient can at this point of care. Family also provides sensory organization in an overly stimulating environment with unfamiliar surroundings and caregivers.

When a patient is admitted to the burn unit, therapy staff makes initial contact with the patient and family/friends (appropriate support system) to explain the role of therapy and treatment program progression. Goal setting and planning for discharge should be initiated at this meeting. As treatment progresses, frequent check-ins and family participation in therapy sessions are beneficial. With the pediatric patient, family involvement may be delayed till later in the treatment course, depending upon the individual child. Some children may react by being overly distracted, acting out, or blaming their parents for the injury.

Early involvement lets the family feel useful and that they are an integral part of their loved one’s recovery. Feelings of guilt or helplessness are alleviated, and the family is able to regain control and a sense of helping. If the family is comfortable, they are involved in the exercise program. This includes children of adult patients --- we have them play balloon volleyball, practice soccer kicks, play a board game or post artwork in their parents’ room, and facilitate the sharing of school and daily activities.

When teaching families, frequent repetition of information and regular quizzing on burn principles is beneficial. A notebook at the bedside for questions and information may be helpful. The family is given therapy “assignments”. Families are instructed in where and how their loved one can be touched. They are encouraged to bring in personal items, and instructed in appropriate ways to assist their loved one, rather than do everything for them. Activities of daily living are simplified and considered “exercise”. Normalcy is emphasized. For children, functional/play activities that facilitate ROM are encouraged, keeping in mind developmental levels. Siblings are included whenever possible, and strategies are implemented to transition the child to return to school.

Discharge Planning and Follow-up Care

Transitioning to home is both an exciting and frightening time for the burn survivor. They leave the “safe zone” of the burn unit, and face a new set of uncertainties, challenges, and reactions to the injury. Progress can be slow and frustrating, however knowledge of what to expect helps the burn survivor and family better prepare for the challenges ahead. It is critical to continue to educate, educate, and educate.
Assessment considerations for discharge include support systems, home routine including hobbies and interests, home environment, availability of care near home, community resources, distance from facility, and transportation resources.

A personalized home program must be workable and feasible, and incorporate daily routine, hobbies/interests, and home layout. No new information should be presented as the burn survivor should have been doing the program while an inpatient. The burn survivor and family need to demonstrate competency and comfort with the home program prior to discharge. They are asked to verbalize and/or demonstrate all skills, which helps to determine further training needs. All new devices (splints, positioners, garments, inserts) need to be trialed for several days prior to discharge. Language and cultural interpreters are utilized for translation of information as well as for assistance in understanding the patient/family’s cultural beliefs, values and practices that may impact follow through.

By discharge, we hope to develop the burn survivor into an “educated consumer.” We discuss the challenges including physical capability, assistance needed at home, other’s thoughts and reactions, the survivor’s thoughts and reactions, possible regression initially once home, and the fact that s/he may know more about burns and burn injuries than outpatient clinicians. The responsibility for therapy is passed to the burn survivor/family, and they are weaned from their dependency on therapy.

Daily responsibility for care shifts from the Burn professionals to the burn survivor and family. They are assisted with the establishment of additional or new roles such as primary caregiver, supporter of independent function, provider of transportation, or enforcer of follow through with the home program.

Once an outpatient provider is located, it is important to communicate the specific burn care needs. Remember that burn therapy is a very specialized field, and many outpatient professionals may not have the appropriate knowledge or skills to treat the burn survivor. Sharing treatment protocols and making additional copies of the individualized care manual or video, onsite training for remote therapists, sponsoring continuing education opportunities, and serving as the community resource facilitates effective burn treatment. Computer technology with email and internet access, and telemedicine are great communication tools. It is also very helpful to have a network of “preferred” therapy providers. Many therapists are also now credentialed with national provider numbers to assure quality of care.

**Ongoing Therapy Program: Back to the Basics**

Splinting Goals:
- To prevent loss of motion and deformity
- To promote functional independence
- To protect anatomic structures
- To preserve skin graft integrity
- To restore function

To provide appropriate splinting, the therapist needs a good understanding of the process and phases of wound healing.
- **Inflammatory Phase:** The healing tissue needs support. Utilize static splints with controlled exercise times out of the splint.
- **Proliferative Phase**: Marked by increased cellular activity and collagen production. Utilize dynamic or static splints to provide gentle, prolonged stretch to influence the direction and alignment of collagen tissue.

- **Maturation Phase**: Scars mature with increased tissue resistance to the stretching forces. Utilize serial static, static progressive or dynamic splints, and serial casts to maintain stretch for prolonged periods of time, to allow tissue accommodation and lengthening.

**Splinting Principles**: To ensure compliance with the splinting program, the following principles should be considered.

- Simple design and pleasing appearance
- Practicality to allow optimum function and sensation of the extremity
- Efficient construction and fit
- Ease of application and removal
- Length of time splint to be used
- Splint and exercise regimen
- Patient factors: reliability, cognition, lifestyle, ability to follow through

**Face Masks**: As facial orthoses are typically worn for 23 hours each day, additional factors need to be considered.

- Patient tolerance
  - Rigid versus soft (elastomer, fabric)
  - Wearing schedule (different masks for various times of the day)
  - Expected patient growth (especially critical with children and mandibular/maxillary bone growth)
  - Hygiene and skin care needs (drooling, contact dermatitis)
- Patient compliance
  - Age
  - Hand function

**Casting**

Dr. Paul Brand’s principle of “inevitable gradualness” outlines the effectiveness of serial casting.

- Maintaining or holding soft tissue at the end of it’s elastic limit will make the soft tissue relax
- The repeated process of resetting the resting length and the tissue’s elastic limit are effective to increase ROM and stretch skin contractures
- Long duration stretch with low forces enhances permanent plastic deformation of contracted tissue

Indications for use of serial casting include pediatric patients, non-compliant patients and contractures that do not respond to other methods. As with splinting compliance, factors as the use of plaster versus fiberglass (weight, time for curing/drying, ease of application), new casting materials and techniques, and colored casting tape should be considered.

**Pressure Garments and Devices**

Goal: To prevent or treat hypertrophic scarring with the basic premise that compression decreases circulation to an area and retards scar development.

Fitting considerations
• Patient factors
  - Edema
  - Wound status
  - Age
  - Hand function
  - Weight loss/atrophy

• Financial
  - Insurance coverage for pressure garments may differ between inpatient and outpatient

Education regarding the purpose and benefits of pressure garments and devices is important. Reasons for non-compliance with wearing pressure garments include difficulty donning, pain, heat intolerance and differences in patient and clinician perceptions. Compliance is improved with comfort measures as easier donning/doffing, better sizing, cooler fabric and more custom options such as pockets, zippers, attached loops. Public perception also affects compliance with wearing pressure garments. Colored garments facilitate positive feelings, increased self confidence, and assists with social re-entry. Design modifications for children as appliqués, lace and character screens may increase compliance.

Therapy Challenges
• Rehabilitation presents unique challenges
  - Prolonged acute care management and continued outpatient care needs
  - Significant long-term physical and psychological impairments
• Psychological reactions are an interactive function
  - Pre-injury personality
  - Social support
  - Complications of burn injury
  - Coping ability
• Manifestations
  - Anxiety
  - Depression
  - Sleep disturbances
  - Non-compliance with therapy program

When burn survivors are non-compliant with their care, it is critical to not overwhelm them and to pace the treatment program. How do we convince patients to adhere to therapy recommendations? Two techniques, the quota system and motivational interviewing, are effective strategies to increase therapy adherence.

The Quota System
The Quota System rewards activity with rest after patients have reached predetermined markers of therapeutic activity that is well within their capacity. Therapy behaviors are identified and measured for three sessions, and averaged. The targeted behaviors must be quantifiable and observable, i.e. wear pressure garment for 6 hours/day, use UE prosthesis for 2 hours, two times/day. The patient is asked to perform the behaviors to tolerance (fatigue, weakness or pain). Performance goals are set for 80% of the average as a starting point; the behavior is increased by 5% each session. The increment is kept at 5% even if the patient can do more, which avoids overwhelming the patient. The technique has successfully been implemented for exercise programs, pressure garments, splints and prosthetic training.
Motivational Interviewing

Motivational Interviewing assumes that the patient is ambivalent about changing behaviors and is an effective strategy to encourage motivation. It relies on the technique of reflective listening to help the patient clarify thoughts and feelings. Motivational Interviewing uses the acronym FRAMES as outlined below.

F → Feedback
R → Responsibility
A → Advice
M → Menu of Options
E → Empathy
S → Self-efficacy

Practitioners using Motivational Interviewing techniques might provide feedback about the burn survivor’s medical condition and risk of not practicing things. (“You have a burned axilla. The chances are good that if you do not maintain active range of motion, the burn will scar and contract and you will require release surgery to use your arm.”). Responsibility for behavior changed is put clearly on the patient. (“No one, including me, can make you do your exercises. It is totally your choice as to whether or not you will do them.”). Non-judgmental advice can be given as long as the patient is not confronted or pushed. (“My advice is to find some way to set up your life so that you are able to attend therapy sessions and do your exercises.”). Patients are presented with a menu of options for change or several opportunities for change. (“You might want to visit me twice a week or perhaps you might want to dry daily exercises with one visit a week.”). Empathy involves reflective listening to clarify that you are aware of the patient’s ambivalence --repeating what the patient has said and adding “I don’t blame you.” (“You find performing these actions very difficult, and I don’t blame you.”). Self-efficacy communicates that you believe that change is possible. (“I know it is hard, but I have seen patients with worse injuries avoid surgery; it really is possible.”). The practitioner can use any combination of these steps, in any order. Active listening and reflecting back to the patient remains the most critical component of this approach.

Summary

Key points to consider in assisting the burn survivor to transition from inpatient to outpatient care include:

• Early family involvement and education
• Assessment of resources
• Empowerment of patient and family
• Personalized home program and training
• Ongoing support and education
• Systems for success
References


Nakamura DY. *Integrating the family into therapy*, panel presentation at ISBI, Yokohama, Japan, 2004 (unpublished).


Other Resources

Burn Therapy Website: [www.burntherapist.com/](http://www.burntherapist.com/)
   Site launched April 4, 2006 with an unrestricted grant from Bio Med Sciences Inc.
   Webmaster: Jonathan Niszczack, OT
   Contact info: [jn@burntherapist.com](mailto:jn@burntherapist.com) or [jn@silon.com](mailto:jn@silon.com)
   (610) 530-3193

OT/PT Resource List can be obtained from the website
   Listed by states and territories, includes names, affiliation, email addresses and phone numbers, years of experience and areas of expertise, for therapists associated with the American Burn Association

Speaker contact information:
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   Winston-Salem, NC  27157
   Email: dnakamura@wfubmc.edu
Nutrition

Caran Graves, RD, MS
Nutrition
When is a burn patient metabolically no longer a burn patient?

Caran Graves MS, RD
University of Utah Burn Center

Case study
- High voltage electrical
- 27% TBSA
- 35 yo male
- 80 kg, 173 cm

Fluids
- Resuscitation
- Maintenance post burn
- ‘Normal’ maintenance

Case study
- Resuscitation = 11,600 ml
- ‘Burn’ maintenance = 5400 ml
- ‘Normal’ maintenance = 2950 ml
Calorie & protein needs

- Increase within 24 hours post burn
- May reach $\geq 2\times$ basal
- Affected by grafting, sepsis, paralytics, temperature

Case study
Curreri = 3100 kcal
BEE 1900 $\rightarrow$ 2600-2800 kcal
25-30 kcal/kg = 2000-2400 kcal

Hospital nutrition support

- Oral– 'High protein' and 'High calorie'
- Enteral feeding – common
- Parenteral feeding – not so common
- Dysphagia – common?
Nutrition After Discharge

Oral
- How much
- How long to continue with high calories
- Monitoring weight
- Dysphagia restrictions
- Self-feeding

**Muscle or fat?**

250 patients (10 – 99% TBSA burns)
Body composition measures (multiple)
Caloric intake >1.2 REE (indirect calorimetry)
Increased fat mass
“Erosion of lean body mass was not attenuated by increased caloric balance, however, fat mass increased with caloric supply (p <0.05)”

Hart et al Ann Surg 2002
Nutrition After Discharge

Nutrition Support
- What formula
- How much
  - Fluid
  - Calories/protein/etc.
- Schedules
- Pumps/supplies
- How long
- Monitoring

Signs of dehydration:
- Thirst is often a first, early sign of dehydration
- Dry or sticky mouth, dry nose, or dry urine
- Sudden weight loss
- Dry mouth
- Nausea or vomiting
-Change in mental status
- Vomiting of bile
- Cold extremities
- Fatigue
- Difficulty breathing
- Sleepiness
- Weakness
- Sunken eyes
- Sunken fontanelle
- Dry skin
- Sunken pupils

Very severe dehydration may cause rapid, weak pulses (see Shock, p. 77), hot, deep breathing, fever, or fits (convulsions, p. 78).

From: Where There Is No Doctor, The Hesperian Foundation

Monitoring
- Weight
- Wound healing
- Dysphagia
Psychosocial Issues

Ruth B. Rimmer, PhD and Rosalia Pereyra, PsyD
Psychosocial Issues & Burn Injury

Ruth B. Rimmer, Ph.D., CLCP
Rosalia Pereyra, Psy.D.
Arizona Burn Center

Objectives
To better understand how premorbid situations affect burn recovery:
- Mental health problems
- Drug and or alcohol addiction
- Education level
- Personality style

Objectives
Discuss psychological issues during hospitalization period:
- Pain
- Depression
- Inability to sleep
- Acute post traumatic stress
- Family problems
Objectives

- Challenges – Post-hospitalization
  - Reintegration
    - Family
    - School
    - Workplace
    - Community

Objectives

- Challenges – Post-hospitalization
  - Disfigurement
    - Learning to live with a changed appearance
    - Dealing with stares and questions from others
    - Physical problems – sleeplessness, pain, itching
    - Sexuality and intimacy

Situational Crisis

- A situation in our environment occurs and whether it is physical, psychological or sociological, pleasant or unpleasant, we will each react as individuals!
- How one responds to situational crisis such as an injury, crime or death depends on how they interpret the situation.
Situational Crisis

- A burn injury creates a situational crisis for the victim, their family and their social circle.

Common Burn Issues

- Sleep disturbance is a common occurrence for most burn survivors. About 75% of patients complain about sleep problems.
- There is an increased incidence of Post traumatic Stress Disorder in persons lacking adequate sleep.
- Improving the quality of sleep is important for recovery and improved quality of life for patients.

Sleep Disturbance

- Medications which can contribute to sleep disturbance include:
  - Opiates
  - Antihistamines
  - Analgesics with caffeine
  - Antidepressants
  - Beta Blockers
Sleep Disturbance

- Often times diagnosis of problem is delayed
- Because lethargy, depressed state and sluggishness can be considered purely psychological problems.
- Disturbed sleep can persist for a year post-burn and beyond.
- Can create anxiety and increased sense of pain.

Sleep Disturbance

- Medication, dedicated sleep routine and relaxation techniques can be used to improve sleep.
- Ask your client if they are having sleep issues, and if so make sure their treating physician is aware of it.

Alcohol and Drug Abuse

- Approximately 20% of adult burn patients are chronic users of drugs, alcohol or both.
- Major Depressive Disorder – Between 43-59% of the injured population is found to have MDD.
Diagnosis

- Acute Stress Disorder – Stress symptomology occurring within the first month – used to predict PTSD
- PTSD – Post Traumatic Stress Disorder- An individual has “experienced witnessed or was confronted with events that involved actual or threatened serious injury or death.”

Diagnosis

- A diagnosis of ASD after a personal injury is a good predictor of future PTSD. Injury severity alone is not a good predictor.
- Samples have found that people 80-85% of people with PTSD have at least one other DSM-IV psychiatric disorder.

Diagnosis

Common Issues – Comorbid to PTSD
- Major depressive disorder
- Positive screen for drugs or alcohol - 45%
- Phobias
- Irritability
- Agitation
Post-Traumatic Stress Disorder

- Often treated with SSRIs (selective serotonin reuptake inhibitors)
- Can be treated with psychotherapy, Cognitive Behavioral Therapy.
- Both treatments may be recommended for some patients.

Disfigurement

- Common myths:
  - Plastic surgery will make me or my family member look the same as I (they) did before.
  - No one will ever accept me again.
  - The scars will eventually just go away.

Disfigurement

- Reality
  - Beauty based, youth oriented society.
  - Many Hollywood villains or monsters look as if they have been burned.
  - At this point reconstructive surgery can only do so much
  - Face transplants may be a possible thing of the future, but are not available now.
Sexuality and Intimacy

- Skin is our most sensitive organ
  - Sensitivity of skin is changed – can be painful to touch or loss of sensation
  - Energy level can be compromised
  - Self-image changes
  - It is likely that burn care professionals are not addressing these issues.

Cultural Issues

- What does diversity mean to the service we provide to our patients?
- In the communication with the physicians and nursing staff.
- In how patients process their trauma.
- In how effective psychotherapy is.

Pain Management

- Pain is a universal experience, yet an accurate definition for pain is illusive.
- Pain is a personal and private experience, consequently it can be difficult for patients to describe it to caregivers.
- IASP defines pain as a sensory or emotional experience connected with actual or potential tissue damage or other pathology.
Pain Management

Four Types of Pain

- **Physiological** – a direct result of disease or injury
- **Pathological** – nerve tissue damage
- **Psychological** – very poor pain tolerance
- **Persistent** – continues for an extended period of time

Pain Management

A variety of conditions can result in the unpleasant experience of pain.

- Burn pain has been documented as being one of the most extreme types of pain and can cause patients to experience both acute and chronic pain.

Acute Pain

- **Physiological**
  - Physically useful, warns of impending damage to the body
  - Well-defined with nociceptive mechanisms
  - Fight or flight response

- **Psychosocial**
  - Anticipation of event and resolution
  - Social, cultural and personality traits interact
  - Anxiety affects perception
  - Financial and family issues may be the outcome
Chronic Pain

- Physiological
  - Not physically useful
  - Difficult to define
  - Does not evoke fight or flight response

- Psychosocial
  - Anxiety
  - Depression
  - Exhaustion
  - Avoidance

Pain Perception

- There is no localized perception center in the brain.
- Perceptions are based upon the *scripts* a person has stored based on past experience.

Pain Perception

- Memory accounts for 90% of perception.
- Affect (limbic input) plays a considerable role in what one perceives (Gregory, 1998).
Socio-cultural values can affect how one responds to pain. Patients can deny or diminish pain for many reasons (i.e. stiff upper lip; fear of addiction to narcotics).

Meaning associated with pain has been found to be more significant in a person’s reported pain level than the actual sensory aspect (Ray, 2002).

Patients who have experienced physical, emotional and sexual trauma tend to have more dysfunctional pain (Ray, 2002).

No direct relationship between actual tissue damage or other pathology and the intensity of pain has been documented (IASP, 1993).
Physiological Components of Pain

- **Sensory**
  - Magnitude
  - Location
  - Sensation
  - Examples:
    - Stabbing
    - Aching
    - Throbbing
    - Burning
    - Tingling

- **Emotional**
  - Highly negative emotional responses
  - Examples:
    - Fear
    - Anxiety
    - Restlessness
    - Nausea
    - Depression
    - Exhaustion

Cognitive Responses to Pain

- Unbearable
- Unmanageable
- Frustrating
- Debilitating
- Depressing
- Annoying
- Exhausting

An individual’s thoughts and perceptions about pain can have a strong impact on pain perception and on one’s ability to deal with pain. (Morley, 1997)

Personality and temperament have been documented to affect a person’s detection of pain, as well as their pain threshold and tolerance (Joseph, 1999).
Cognitive Responses to Pain

Do Your Depressed Patients Hurt?

- 69% of Patients Present With Physical Symptoms
- According to a study in the *New England Journal of Medicine*, 69% of depressed patients in primary care presented with physical symptoms as a chief complaint (N=1146 patients with major depression).
- Vague aches and pains were as common as an anxiety disorder among depressed patients in an NIMH-funded epidemiology study.

- Physical symptoms of depression may be less responsive to treatment relative to other symptoms
- Treatment effects across outcomes in a naturalistic investigation of depressed patients
- A recent, naturalistic, randomized trial showed that painful physical symptoms associated with depression were least affected by treatment
- Physical symptoms—particularly painful physical symptoms—are more likely to persist

- A clinical study shows residual depressive symptoms may trigger relapse.
- 3 times more patients with residual symptoms were likely to relapse.
- Among patients with residual symptoms, >90% had mild-to-moderate somatic symptoms.
Pain management should include:

A comprehensive approach to meeting the needs of patients who experience problems associated with acute or chronic pain.

An organization wide, interdisciplinary initiative that includes medical, nursing, pharmacy and allied health professionals whose aim is to make pain assessment and management a priority.


Pain Management Benefits

- **Patient Benefits**
  - Better outcomes
  - Increased knowledge about pain issues
  - Additional options for dealing with pain
  - Increased satisfaction
  - Less compromise to immune system
  - Shorter recovery time

Unrelieved pain in infants and children can have undesirable and detrimental short and long-term effects.

**Potential Responses**

- Physiological = Poor immune response
- Anatomical = Longer recovery time
- Behavioral = PTSD – avoidance & anxiety
Pain Management Benefits

Common Misconceptions - Barriers
- Infants and children do not experience pain in the same way as adults.
- Lack of assessment and reassessment because children cannot communicate their pain.
- "No pain, no gain".
- Parents are not a good source of information regarding their child’s pain.
- Children don’t remember pain.

Pain Coping Techniques

- Teaching patients additional ways of coping with pain:
  - Helps the patient, the patient’s family, and also helps the staff!
  - Adds to the drug regimen.
  - Good for acute and chronic pain management.

Distraction Techniques

Hypnosis
- Relaxation
- Power of suggestion
- Does not control patient’s mind
- Thorough explanation to patient, family, and staff
Distraction Techniques

Guided Imagery
- Relaxation techniques
- Visualization of being somewhere else
- Can involve different senses

Meditation
Prayer

Distraction Techniques

Bubble Blowing
- Blowing bubbles can assist in slowing down respirations and regulation of breathing.
- Actively relieve pain. "Blow away the pain."

Distraction Techniques

Positive Reinforcement
- Assistance with dressing change equals control
- Touch
- Calm voice
- Allowing patient to express themselves
Distraction Techniques

Music Therapy
- Sensory input which is as sensorily real as pain. Music also has sensory output from the limbic system, which is site of emotional synthesis.
- Vibration of music can be brought into close vibration with pain and the psychological perception of pain is altered (Harris, Eagle, 1988).

Distraction Techniques

Pet Therapy
- Positive interaction between humans and dogs has been shown to produce physiological changes in people, including decreased blood pressure and cortisol levels, and increased levels of chemicals that impact the pain pathways.

Pain Management Summary
- Pain is subjective
- Past experience is a very real part of pain
- Pain management is imperative
- Pain is the “Fifth Vital” sign
- Distraction and coping techniques can be tremendously beneficial to the patient and staff!
Pain

“It is salutary that all of us, at one time or another, will be in the unpleasant situation of personally verifying the inadequacies of the current therapy of pain in man.”

Millan

Psychosocial Interventions

- Psychiatry – Drug Therapy
- Psycho Therapy – Sex Therapy
- Family Therapy
- Play Therapy
- Hypnotherapy
- Massage Therapy
- Support Groups
- Recreational Therapy

Burn Survivor Support

- Burn survivor support groups – in person or online:
  Check with the Burn Center or Unit in your community.
  - http://www.burnsurvivor.com/
  - http://www.survivingburns.org
  - http://www.burnsurvivor.org/
  - www.burnsupportonline.com/
Intro: Preparation for returning to the community (home, school, and work) begins upon admission with psycho education. While there are consistent goals for each and every patient and their support network, this education must start (as Carl Rogers said) where the patient is. The amount of information given at a time, the manner in which it is given, and how often it is reviewed is based on the needs of each individual patient and support system.

I: Psychological education
   A. Definition: “Psychological education” is a phrase that is commonly used in health care. It is an ongoing process that is needed throughout all phases of treatment of a mental illness. Goldman (1988) defines psychological education in psychiatric settings as “education or training of a person with a psychiatric disorder in subject areas that serve the goals of treatment and rehabilitation...”

The Expert Consensus Guidelines (1999), APA Practice Guidelines (2004), Schizophrenia PORT (NIH, 1995) and the IAPSRS Guidelines (1997) identify the following topics as important in psychological education programs for individuals with severe mental illnesses: 1) symptoms associated with the illness, 2) course of illness, 3) treatment, including medications, and 4) relapse prevention. Additionally, these guidelines recommend the involvement of families and significant others in the psycho education process.

   B. In the Burn Center psychological education is used by most team members to create a sense of empowerment and autonomy with both the patient and their family. Psychological education can create a sense of responsibility for both physical and emotional recovery. The behavioral health team’s goal is to normalize physiological and emotional reactions to trauma and teach coping skills that may lessen the acute stress and post traumatic stress responses that patients are susceptible to.

      a. Pre-trauma variables such as prior history of trauma, addiction history, family support, patient/family history of psychiatric illness, and age affect how much information to give at a time and the length of time it may take to provide this information
      b. a good psycho social assessment is essential

II: Psychological education early in admission to enhance coping in patients and families. Psychological education includes:
   A. Normal physiological and emotional responses to trauma
   B. Developmental responses to injury and hospitalization
   C. Parenting interventions
   D. Self care tactics
   E. Orientation to hospital environment
      a. Health care team roles
      b. Definitions of medical jargon
      c. Orient to physical space
      d. Expectations for admission
   F. Coping strategies to manage pain in non-pharmacological ways

II: Psychological education mid admission to increase discharge and community re-entry readiness. Psychological education includes:
   A. Role play handling questions, stares, and teasing
   B. Preparation for delayed emotional response to trauma due to rigor of injury and recovery
C. Community resource referrals (community mental health agencies, medications for low income or unfunded patients)

D. Assessment of risk for difficult emotional transition to school or work
   a. Area of body affected by burn
   b. Family support system
   c. Involvement of school
   d. Accident occurred at work
   e. Community support

E. Assess wants and interests of pediatric patients and families for a formal school re-entry program
   a. Program based on individual student
   b. Pre-reentry needs of school (education on burns, organization of district therapy and nursing staff)
   c. Impacted by technological capabilities of school
   d. Distance to travel
   e. Unit’s program may be combined with the Phoenix Society’s new school re-entry program

F. Orient to burn specific resources
   a. Burn support group meeting- weekly on the unit
   b. Burn camp for pediatric and adolescent patients
   c. Adult burn retreat
   d. Phoenix Society
   e. World Burn Congress

IV: Psychological education at time of discharge to re-enforce information already provided and implement needed programs.

A. Review material already discussed
   a. This is a time when the interdisciplinary team approach is especially valuable.

B. Implement planned school re-entry program. Time line and program vary for each patient

C. Ongoing assessment of traumatic response symptoms in patients and families-local community referrals as needed

D. Review of psycho education, parenting interventions, and coping skills as needed

E. Burn Therapy checklist for readiness to go back to work:
   a. Wound healed
   b. In ABSS if needed
   c. Able to demonstrate a grip strength of at least 50#, as this is what is required by law to drive
   d. Off all narcotic pain medications to ensure safety in driving and working machinery. Or, back to chronic pain med schedule patient was on prior to burn
   e. Functional Capacity Evaluation (FCE) for workers compensation patients to assess what they can do now
   f. Referral to work hardening program if appropriate
   g. Referral to burn unit social services if patient endorses acute stress, PTSD, or depression symptoms
i. Unit social services works with patients and workers comp case managers to find appropriate outpatient mental health referrals

ii. Referrals to Work Force Services for job re-training if needed

V. Psychological education following discharge as needed.
   A. Patients noted to be struggling followed in outpatient clinic, encourage utilization of local community resources
   B. Referrals from outpatient Nurse Practitioner or Physicians received regularly
   C. Follow up with schools as needed
   D. Burn Unit camp program evaluates psychological educational needs on an ongoing basis

VI. Barriers to providing psychological education include
   A. Lack of patient support system
   B. Decreased family availability
   C. Diminished patient and/or family coping skills
   D. Family conflict
   E. Substance abuse issues
   F. Psychiatric illness
   G. Bereavement counseling if patient is terminal
References


Burn Survivor

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For the health care provider reading this chapter, I sincerely hope you will remember and act upon three critical points which can definitely help facilitate the highest level of rehabilitation and quality of life for those burn survivors whom you care about and serve:

1. In terms of long-term quality of life, social and psychological rehabilitation is, for the vast majority of survivors, profoundly more important than recovery of physical function.  

2. Personally meaningful rehabilitation and recovery from significant burn injuries can be greatly facilitated by learning behavioral and image enhancement strategies.  

3. Currently, there is not a standard and systematic way to address the critical and pressing social and psychological rehabilitation needs of burn patients. Compassionate and skilled work is done by so many in the burn care field. Yet, many burn survivors I speak to feel they are left to fend for themselves in the process of recovering their social and psychological “balance.” It is no longer acceptable to ignore the quality of life concerns of burn survivors as it relates to their social and psychological rehabilitation. It is unnecessary given the existence of how relatively inexpensive it is to implement hospital-based Behavioral Skills and Image Enhancement Skills Programs as well as other important after care interventions.  

In this chapter, using both my personal and professional experiences, I want to clearly demonstrate the value and profound importance of a Behavioral Skills and Image Enhancement Program as one part of a comprehensive approach to burn care rehabilitation. The salient goal of such a program is to promote optimal community integration for burn survivors and to help them achieve a higher quality of life.  

For people with visible facial and body differences, social interactions “have the potential for psychological and social destruction.” Preventing this destruction must be a primary goal of rehabilitation. I encourage burn care professionals to “examine” existing discharge and rehabilitation practices to assure that patients receive the best opportunity, both functionally and socially, for community integration.  

Currently in burn care, many patients and their families receive scant information regarding the social interaction challenges they may encounter during community reentry and positive ways to handle them. Few obtain resources before discharge or during rehabilitation regarding behavioral skills to facilitate community integration or cosmetic products and image information to increase facial harmony and general appearance. Several U.S. and Canadian burn centers presently include a Behavioral Skills and Image Enhancement Program to assist patients with community integration and creating a positive appearance. These programs clearly recognize the need to address the many pressing psychosocial functioning concerns of their patients.
After the acute care phase, a Behavioral Skills and Image Enhancement Program can diminish additional anxiety and psychological pain by teaching patients and families how to confidently manage the predictable challenges of social interaction, including staring, teasing, intrusive and inappropriate questions, by facilitating the development of social competencies that are specific to living with a disfigurement. Image enhancement offers corrective cosmetic techniques and color analysis. These strategies act as an adjunct to the improvements of reconstructive surgery and can increase a patient’s self-confidence and social comfort.

Numerous testing instruments exist and research studies are funded to measure the psychological impact and quality of life of people with a facial and body difference. While this information is important, it is equally, if not more important, to offer patients specific behavioral and image enhancement “tools” that improve community integration, quality of life and produce a positive psychological impact. These “tools” increase the opportunity for patients to view themselves as burn survivors, not victims, and realize they can live a full and meaningful life.

**Personal Perceptions of the Need for Behavioral Skills and Image Enhancement Interventions**

“I like living. I have sometimes been wildly, despairingly, acutely miserable, racked with sorrow but through it all I still know quite certainly that just to be alive is a grand thing.” Agatha Christie

Through sharing my own personal experience as a burn patient, I believe I can describe many of the hurdles other burn survivors face that sustain injuries that alter their appearance and physical abilities. I became a burn victim because of a rear-end automobile collision that caused a gas tank explosion. I spent 2 1/2 months in a burn center with second and third degree burns on my face, scalp, arms, hands, and back. I lost the fingers on my right hand and my former appearance. I knew my life would be different. A lot of work mentally, physically and spiritually lay ahead.

A serious burn injury can challenge one’s courage, stamina, faith, and even one’s will to live. My journey as a burn patient was wrought with overwhelming pain and fear, tears, lack of control, profound grief and loss, and thoughts of suicide. On the same journey, traveled loving family and friends and a burn team who offered consistent care, encouragement, emotional support, prayers, and hope for the future. The injury that changed my life suddenly and drastically, proved to be my most intense opportunity for emotional, psychological, and spiritual growth. Even though I was armed with a strong support system, I learned that the hard work of life could only be done alone. Many survivors have come to learn that the “real” healing begins at discharge as we leave the safe cocoon of the burn center. That is when actually living with a burn injury becomes a reality. No hospital program existed to prepare me to face the future. I was unprepared to cope with my new life, as a person with facial and body differences, just as many survivors in burn centers today may be similarly unprepared.

I did not see my face before discharge from the burn center. I was afraid to look, avoided reflective surfaces, and no one suggested that I do so. Viewing my disfigured face for the first time in the bathroom mirror produced anguishing cries of sorrow, thoughts of suicide, and deep depression. Sadly, I still hear similar scenarios from burn survivors who were not supported by burn center staff to see their faces before discharge.
Out in public, too much sudden and unwanted attention brought intense discomfort. Stares, whispers, startled looks, double-take glances, and invasive questions from strangers made social outings and daily tasks awkward and difficult.

At home, I avoided looking at my facial reflection in the mirror. Seeing my grafts and donor sites, that looked wonderful to the burn center staff, frightened me. Touching my right hand with my fingers amputated was unnerving, and the sober realization that I could no longer play tennis caused engulfing despair. The loss of my romantic relationship seemed unbearable, and I mourned possibly never having another. Waking in the middle of the night and realizing this was not a bad dream literally made me shudder. I truly wanted to die because I could not visualize how I could live successfully. How would I teach again? How would I live independently? How would I interact with people I didn’t know? How could I let go of my former “image” and accept and love the new “me?” These were some of the obstacles and worries that I faced and many that other burn survivors encounter even as you read these words.

The challenge of adjustment was clearly mine to figure out, mainly on my own. During my recovery, I learned many coping skills through trial and error, self-help books on communication skills and body image. I studied how people reacted to me and experimented with the various behavioral skills to create a comfortable interaction.

Through private counseling, spiritual work, a masterful and compassionate plastic surgeon, support from other burn survivors, prayer, and consistent reinforcement from family and friends that I could make it, I was able to reconstruct a meaningful life. What was surely a crisis at the beginning gave me an opportunity to grow in ways I could not have imagined, to experience the link between our spirits and our biology, and to learn a tremendous amount about life, people and myself.

With the fingers of my right hand amputated and a reconstructed grip area, I relearned familiar daily tasks to live independently and resume my teaching career. While progressing with physical and emotional rehabilitation and additional reconstructive surgeries, I returned to the classroom wearing pressure garments from head to toe. One of the first classroom lessons I provided was a school reentry program that I designed to benefit my students and me. This program taught the students about my burn injury, acute burn care, the rehabilitation and reconstructive surgical processes, why pressure garments were worn, and gave the students an opportunity to ask questions.

The School Reentry Program, or more accurately the Job Reentry Program, made all the difference for both of us. We were more comfortable being with each other, and it allowed me to continue worry free about how my students would handle the appearance of my burns and the garments. The truth did set me free. That is, by squarely facing the challenges of my condition and talking with the children about these challenges, I spoke about what is often left unspoken. “Why do you look like that?” “Are you ever going to look the same as before?” and “Why are your fingers so crooked?” were just a few of their questions. An even greater freedom came from speaking about the truth of my condition. The school/job reentry program concept led to my eventual departure from classroom teaching to making this intervention available to burn-injured students in southern California burn centers.

I also focused my attention on the areas of body image, communication, and behavioral skills through formal education, personal experience, interviews and observations. With the
support of the burn rehabilitation team at Rancho Los Amigos Medical Center in Downey, California, I began the first hospital based Behavioral Skills and Image Enhancement Center.

**Long-term Adaptation to Burn Injuries**

*Courage is as often the outcome of despair as hope; in the one case we have nothing to lose, in the other all to gain. Diane De Poitiers*

The long-term consequences of burn injuries present many rehabilitation challenges. Few studies exist regarding the long-term results of traumatic burn injuries. Improvements in technology and medical care have led to even greater numbers of people surviving burns with greater TBSA injuries. While the quality and accessibility of surgical interventions increases, unfortunately, community reentry interventions and psychosocial support does not. Discharging patients without providing them and their families with skills to manage social interactions often results in difficult psychosocial adjustment after a burn injury. Community integration and after-care programs as part of burn care protocol are essential to successful post-injury adjustment.

I believe individuals with burn injuries can create a meaningful life. Who a person is before the burn injury influences their success along with their personal and professional support systems. Patients do not move from burn victims to burn survivors and “thivers” alone. They need assistance before discharge and ongoing after care programs to meet the challenges of community integration. In this author’s humble but personally and professionally informed opinion, burn center care that focuses primarily on physical functioning without equal effort and emphasis on social functioning accomplishes half the job.

Physical rehabilitation concentrates primarily on burn survivors regaining functional independence. As much emphasis must be placed on their first community outings when patients go home. Educating and helping them to form a specific “action plan” when people stare, how to answer questions or how start a conversation can relieve social anxiety for the patient and the family. Health care professionals want to assist but often lack the expertise to offer helpful advice. Just as important as the physical ability of burn survivors is their social-ability in returning to the community.

Community integration involves a survivor’s ability to resume former activities within home, social relationships, sexuality, leisure and recreation, church, community, school or work. The literature reveals little about this aspect of survival. Various instruments such as the Burn Specific Health Scale measure the health status of burn survivors, their vocational outcomes, and their return to work outcomes. However, while this information is highly relevant, such measures often fail to capture the body image and social interaction components that are so important to the burn survivor’s quality of life.

The following thoughts by Norman Bernstein, M.D., a noted psychiatrist experienced in treating burn survivors, summarizes the mission of rehabilitation professionals dedicated to the quality of care and optimal recovery of “people” with facial differences and disabilities. “Societal attitudes about deviance and people who look damaged can be modified only a little, but determined professionalism, coupled with humane feelings can yield great increments in improved living for many people who would otherwise be lost to society and whose lives would be largely lost to them.”
Although written 25 years ago, Bernstein’s words are as timely today. Attitudes of the public have changed slightly since my burn injury. Change is difficult because society equates disfigurement with imperfection that often results in responses of fear, rejection, and social discomfort. We live in a society generally committed to “first impressions” that frequently create false judgments. Many societal prejudices regarding visible differences and disability and problems with public education exist which seem too enormous to solve. Therefore, a goal of establishing programs to assist survivors cope with difficult social situations and a positive and well-groomed outer image as well as a positive self-image is important.

Disfigurement Causes Impairment

Rehabilitation professionals must examine the importance of appearance in our society in order to improve the self-image of people with a facial and body difference. A facial or body difference frequently creates discomfort in community situations, school, and the workplace. People frequently suffer a diminished quality of life. Facial and body differences receive less significance and importance during rehabilitation because it is regarded as cosmetic and not a functional impairment.

Disfigurement, however, causes as much impairment in one’s life as does a functional impairment. Research reflects that many people react negatively to facial difference, pioneers in the psychology of cosmetic treatment, suggest that rejection of people with a facial difference is more frequent and severe than for those with a functional impairment. The needs of the functionally impaired are more easily accepted and understood.

Frances Cooke Macgregor, a research pioneer dedicated to the study of people with facial differences, sites that “in-depth studies of the social and psychological problems associated with facial anomalies, both congenital and acquired, conducted on 181 plastic surgery patients more than three decades ago showed that the patients’ major complaints and difficulties centered around the patterns of interaction between themselves and others.”

Macgregor further states that after beginning her research on the life experiences of individuals with disfigurement in the 1960’s found that “…In 1987, and more than 500 patients later, we found the complaints and problems to be the same. While distressed each day by the reflection in their own mirrors, as much if not more hurtful and damaging to their self-image and self- esteem is seeing their own flawed faces reflected in the reactive behavior of the non-disfigured. This is experienced most often during face-to-face encounters with strangers: when traveling to work or school, shopping, entering and eating in a restaurant, walking along the street, standing in line. Attending to what may be mundane affairs for those whose faces are unremarkable is fraught with potential hazards for those who look different.”

We live in a world in which a person’s face acts as a criterion of the person. Appearance determines how one interacts in a society that often judges facial and body differences by an implied standard of how people “should” look and what is deemed “normal.” Facial and body features that deviate from the norm not only receive differential treatment, but also can become the object of negative judgment and prejudice.

Society’s established stereotypes suggest that “desired” facial shape, features, and expressions imply such qualities as personality, intelligence, character traits, and
temperament. The physically attractive are considered more socially desirable and expected to obtain better employment, marry earlier, enjoy more successful marriages, and demonstrate better parenting. These factors influence us in our reactions regarding people with a facial difference. Because personal appearance influences the reactions and responses we receive from others, programs directed toward behavioral and social skills to manage societal interactions and image enhancement are vital.

**Forming Body Image Perceptions**

According to Macgregor, many factors influence how we perceive our bodies. Two such factors are the way our parents related to and touched our bodies as babies and as growing children, and what we learned from role models about what it is like to live in and value a body. Other factors include the acceptance and rejection we have felt from peers, every negative and positive piece of feedback we and our body have received from people whose opinions count to us, and the ways we have perceived our bodies to fit or not fit the cultural image.

Hutchinson believes that to understand how we arrive at our relationship with our bodies, we must understand the culture in which we have developed. We live in a society that places a high premium on physical appearance. Much of the literature confirms the benefits of an attractive appearance.

Health care providers must examine their own reactions to facial and body differences and their personal body image perceptions. Our body images are shaped from all of our life experiences since childhood. Individual attitudes concerning body image effect body image discussions with burn survivors.

According to Thomas Cash, a leader in the study of body image, “two basic attitudinal elements are body image investment and evaluation. Investment refers to the cognitive-behavioral importance persons place on their appearance. Evaluation refers to their positive-to-negative appraisals of and beliefs about their appearance (e.g., body satisfaction-dissatisfaction). As Cash and Szymanski showed in 1995, body image evaluations stem from the degree of discrepancy or congruence between one’s self-perceived physical characteristics and personally valued appearance ideals.”

Rehabilitation mainly focuses on helping patients gain their maximum physical function and leaves improving a patient’s appearance to plastic surgeons. Therapists, psychologists and other health care professionals sometimes avoid the topic of appearance and image. In our society, people tend to avoid what makes them uncomfortable. Many feel ill at ease talking to the bereaved or to someone suffering a terminal illness. Discussing body image and scars and the possible stares, questions, whispers, or laughter burn survivors could experience may also be avoided. Those in burn care that are comfortable with the subject of body image will be the most effective assisting survivors and their families with community integration.

Social acceptability of one’s appearance is a major goal for a person with any disfigurement. The importance of social acceptance is basic to establishing social relationships, healthy psychological adjustment, and success in school and career. Rehabilitation professionals and other health care professionals need greater information and training regarding how to help people cope and develop skills in dealing with facial and body difference.
Reconstructive surgery is the great “hope” for many burn survivors. It is also the great “myth” because rarely does restoration to one’s pre-injury appearance occur. Improvement of the appearance occurs in gradual stages. With each surgery, there is a new facial change and new “image” adjustment. Thomas Pruzinsky states that an individual “needs to accommodate their body image hopes and expectations to what is surgically possible.”

Patient-perceived discrepancies (e.g., between past and present body image or between ideal and actual reconstruction) are likely to be most salient in influencing patient-perceived quality of life. Patients and surgeons must decide the most appropriate surgical endpoint.”

He further cites that we do not know if more surgery results in greater body image improvement and enhanced quality of life.

**Behavioral Skills: an adjunct to psychosocial and rehabilitation care**

“*I have a lot of things to prove to myself. One is that I can live my life fearlessly.*” Oprah Winfrey

A Behavioral Skills and Image Enhancement Center offers education and skills to burn survivors that help them achieve social and community independence and establish a positive appearance. Successful community integration refers to a survivor’s ability to resume activities within the community and at home, work, school, church, and leisure as well as resuming former social relationships and beginning new ones. By learning practical strategies to practice and integrate into daily life, burn survivors receive the opportunity to achieve optimal community integration. STEPS to Social Comfort and Confidence, behavioral skills to manage stares, questions, and teasing, corrective cosmetics application, and color analysis techniques are taught to children, teens, and adults.

Learning ways to successfully cope with the subtle and overt public scrutiny can be stressful. Some people were seemingly unaffected by my facial and body disfigurement. Others reacted with double takes, shocked expressions, intrusive questions, or by rapidly turning in another direction to avoid eye contact or interaction. Sometimes individuals in restaurants would continuously stare until I looked directly at them and “waved at them” to break their gaze. There were times someone would get up and move if I sat next to them in a waiting area or chose to stand if the only available seat was next to me. Direct and indirect comments such as “Take your mask off, Halloween’s past,” “Will she be okay?” “I wonder what happened?” and “Mommy, look at that lady’s face!” made outings unpredictable, frustrating, and anxiety producing. Other burn survivors I have met report similar experiences, and Frances Cooke Macgregor’s long-term empirical studies have documented the pervasiveness of such experiences in the lives of others learning to live with disfigurement.

People sometimes react to touching my hands. With the fingers on my right hand amputated, some avoid shaking my right hand even though I have a grip. I prefer to shake hands right-handed and developed a social strategy to make it more comfortable for me and the other person. While dancing, some men have grasped my wrist instead of my hand. Perhaps they fear hurting me or are uncomfortable about touching my hand. I explain that it is all right to touch my hand and with a smile place my “little hand” in my partner’s hand. It took time to figure this out and react in a kindly assertive way.

Burn survivors benefit from behavioral skills programs that teach communication techniques and skillful ways to handle social situations. Opportunities to practice new methods in social situations gives survivors and families increased social competence and the awareness that
they do not have to hide, act fearful or feel shame.

All aspects of nonverbal language impact social success, according to Duke, Nowicki, and Martin, but facial expressions and paralanguage (such as tone of voice, rate of speaking, and volume), have a great influence on interpersonal communication. When we meet a new person, we first look at their face. The facial and body expressions displayed, may send incorrect information about our feelings and personality. Understanding and effectively using interpersonal cues and facial expressions, provides a path to successful interactions and relationships.

**STEPS to Social Comfort and Confidence**

As a result of my experience of learning to live with a facial and body difference, I designed a five-step behavioral skills program called STEPS to Social Comfort and Confidence. STEPS is an integral component of The Behavioral Skills and Image Enhancement Program. Self-talk, Tone of voice, Eye contact, Posture and Smile are the components of STEPS. This model offers effective and easy behavioral skills to follow that can influence social encounters. Understanding the powerful role that verbal and non-verbal signals play in the responses burn survivors receive is vital to a successful community integration. Knowledge of the STEPS model and its conscious use in daily activities aids in developing self-confidence.

**Self-Talk - our ongoing conversation with ourselves.**

“No one can make you feel inferior without your consent.” Eleanor Roosevelt

The first S in the STEPS model represents self-talk. Self-talk is the constant, real-time conversation going on in our minds. This conversation directly affects our actions and feelings and has a great influence in our lives. McGraw asserts that if the “internal dialogue is rationally positive, you are energized and strong: both your mind and body are functioning from within a “zone” that opens up new possibilities for achievement. If your internal dialogue is negative, you’ll feel it, even at the level of the cells in your body. It both comprises and reflects your personal truth and, therefore, your self-concept.”

Because of the meanings, ideas, and emotions words suggest, the words we choose are powerful tools. Slaikeu and Lawhood called these words, and the emotions they conjure, “self-talk.” Since self-talk is such a powerful force in our lives, it is wise to understand its significance and use it to our advantage, especially in times of crisis. Instructing burn survivors about the power of self-talk to aid or impede their lives seems essential to successful community integration.

Rehabilitation enables people to rebuild their lives. For burn survivors with physical limitations or body image changes, life may appear negative, and their self-talk may be negative. Coaching them to change negative thoughts to constructive ones can produce positive changes in feelings and behaviors. Self-talk about surgery, therapy, and the future affect how survivors act and feel. Each phase of rehabilitation benefits from repeated positive thoughts and images.
Self-defeating phrases such as, “I can’t do it!” “My life is over.” “I’m too afraid,” or “It’s impossible,” trap people in a hopeless and helpless state. Burn care specialists who recognize negative self-talk and are aware of its impact can coach patients to integrate positive self-talk into their sessions.

During rehabilitation, burn survivors have the opportunity to learn new skills, and rebuild fulfilling lives that initially are difficult to imagine.

“When a crisis occurs, everything associated with it is usually negative. My crisis have more often than not marked a new course for my life, which is more fulfilling and more exciting than anything in the past. The special feature of a crisis is being suddenly cut off from past patterns, habits, and interdependencies. Along with the distress and pain is freedom. Freedom to build again with a new foundation and modern structure using wisdom you didn’t have the last time you built”\textsuperscript{15}

The above quote by a noted plastic and reconstructive surgeon is his response to a crisis in his own life. These few words provided strength and a new perspective to me, and I often share them to inspire burn survivors and their families facing a life crisis.

An innovative method involves combining positive self-talk with positive imagery. Self-talk uses the left side of the brain (the language center), while mental images make use of the right side (the image center). Sports psychology uses these techniques with athletes to improve individual and team skills. Cousins, Simonton, Siegel, and other researchers have completed work on the mind/body connection and its affect on health and well-being. Evidence exists that these approaches produce positive results for cancer, arthritis, asthma, and other chronic illnesses.\textsuperscript{16,17,18,19} Similar techniques incorporated in burn rehabilitation programs can be helpful to maximize results.

**Tone of Voice – “sound like a winner”**

Tone of Voice, the second \textit{STEP}, influences communication and how others respond. Voice intonation influences a listener’s responses to and judgments about the person speaking. Negative emotions and feelings are conveyed when a person speaks in a monotone, timid, defensive or angry tone of voice. A friendly, energetic, and pleasant tone of voice reflects an image of confidence and social ease. Coaching and modeling this behavioral skill to burn survivors demonstrates the advantage of practicing and integrating a positive tone of voice into daily interactions. When people appear comfortable with themselves, others seem to relax and act authentically.

**Eye contact…“Look everybody in The Eye”**

Eye contact is the third \textit{STEP} and an essential behavioral skill and communication tool. Eye contact connects people and generates potentially comfortable and fulfilling interactions. The appropriate use of eye contact is one of the most frequently noted characteristics of socially successful children and adults (Duke, et al., 1996). For burn survivors the lack of eye contact may be interpreted as a lack of self-assurance or shame. Glancing away or looking down communicates a negative message. Coaching burn survivors to practice maintaining eye contact for several seconds before looking away can result in more positive exchanges.

**Posture… “stand up for yourself”**
Posture, the fourth **STEP**, signals to others one’s social comfort and confidence. The habit of walking or standing with the rib cage lifted and one’s head and chin up sends a message of self-confidence to others. Slumped shoulders and the head bent down often indicate self-consciousness. When a burn survivor acts ill at ease, others may be uncomfortable approaching them. Coaching and demonstrating postures and their non-verbal messages can produce lasting behavioral changes.

**Smile… “greet people with a smile”**

The final **S** in **STEPS** represents a smile. A smile can evoke instant good will between people. When we smile at others, positive energy radiates from us. Burn survivors who smile at strangers have a social advantage in forming relationships. A smile has the power to eliminate apprehension and prejudicial judgments. Smiles improve one’s facial image by “softening” the intensity of scarring and skin discoloration. Coaching a burn survivor to relieve the anxiety of awkward social situations by “wearing” a relaxed smile generates big benefits. A smile sends a clear message that a person is approachable and at ease.

Canfield suggests that by thinking and behaving in a positive manner, we influence how other people respond to us.20 The **STEPS** are simple and common sense “tools” to influence how others respond to us. However, not everyone understands this especially while managing the stress of burn recovery. It takes health care professionals who are comfortable with their own body images to “coach” burn survivors about their body image. In our society people tend to avoid what makes them uncomfortable. Many feel ill at ease talking to the bereaved or someone with a terminal illness. Therefore, frank discussions of scars, amputation, pressure garments, and splints that may elicit stares, questions, whispers, teasing or laughter may also be avoided. This avoidance is a formula for possible social destruction and deters the potential for smooth community integration.

We are constantly teaching others how to respond to us through nonverbal communication. From my personal and professional experience, I have seen lives expand because the message being communicated has changed. A Behavioral Skills and Image Enhancement Program can help provide the strategies for an improved self-concept, easier community interactions, and living life fearlessly.

**Behavioral Skills to Manage Stares, Questions, and Teasing**

*There is nothing either good or bad, but thinking makes it so.* William Shakespeare

Part of a Behavioral Skills and Image Enhancement Program addresses empowering ways for burn survivors to handle stares, questions and teasing. Whatever meaning or value a particular situation of staring, questions, and teasing holds for a burn survivor will be the meaning or value they give to it. It is not always possible to change what happens externally in the world, but one can definitely change how he or she reacts to and internalizes it.

Before discharge from the burn center, patients and families need to be informed that some people will stare, ask questions. Children may face teasing. Many burn survivors that I have
met claim they were discharged without preparation and not given the skills to manage social situations. I’m not certain why this situation still exists, but I fear that no one wants to step forward with more bad news and health care professionals are not always equipped with the “tools” to help patients and their families in this way. Avoiding this vital feature of discharge planning increases the stress and anxiety already felt. The articles and books listed in the “Resources for Professionals and Burn Survivors” support understanding and gaining more information to benefit patients and their families.

Before sustaining their injuries, most burn survivors socialized in shopping malls, restaurants, community events, and other public places with minimal interest from others before their burns. If a burn injury is visible, all of that has changed. Without the preparation and skills to cope, a great deal of sudden and “unwanted” attention is frequently overwhelming.

All of us tend to look at people who are different; it seems to be part of human nature. We look at people using sign language, walkers and wheelchairs, and those sporting tattoos and body piercing. Again, how burn survivors interpret and perceive stares impacts their ability to handle stares.

One of the most effective responses to someone staring is simply standing up with straight posture, looking the person directly in the eyes, smiling, and with a warm, friendly tone of voice, saying, “Hi, how are you doing?” or “Hi, how’s it going?” or “Hi, great day, isn’t it?” The result amazes me and seems like magic. Most people are so amazed to see and hear the confidence and poise projected that they usually respond with a pleasant comment and look away. Most people are curious, and when they discover someone can respond comfortably and confidently, they are surprised, satisfied, and a little embarrassed about staring. The reward for the burn survivor is “meeting the challenge confidently and graciously” and the benefit of “personal pride in character courage, inner-strength, and spirit.”

Part of the Behavioral Skills Program teaches a technique called **Rehearse Your Responses.** (See Figure 26-2) Educating patients and families before discharge to master the challenge of invasive questions is important to successful community integration. Being bombarded with questions presents moments of anxiety and dread for some. For others it is a chance to talk about their experience. Everyone’s comfort level differs when it comes to people asking questions.

Questions may come from a curious child who suddenly shouts, “Hey, what happened to you?” Concerned adults may exclaim, “You must have been in a bad accident!” A compassionate elderly lady may comment, “Oh, I bet you have been through so much.” Each of these situations seems to require a response.

The most uncomfortable part about people asking questions is that it is often in a public setting and in front of others who are also curious. Burn survivors frequently experience nervousness and physical symptoms when they first begin socializing. Helping them or a family member to write a two or three sentence response to possible questions gives them a foundation. One example might be “I was burned in a house fire several years ago, and I’m doing much better now. Thanks for asking.” Another possibility is “I was injured in a work accident, and I’m recovering pretty well. Thanks for your concern.” Adding the sentence
“thanks for asking” or “thanks for your concern” brings a polite and clear closure to the conversation. Creating polite, warm responses works the best; although, a little humor never hurts in some situations. For some this will be easier than for others. Everyone has a different set of social “abilities.” and it may take some survivors longer to feel confident. Taking the time to create responses and practicing them is well worth it.

If further discussion is demanded, a simple answer like “That’s all I want to discuss it today. Thank you for understanding” usually gets results. The burn survivor is in control of the conversation and has responded in a friendly and polite way.

Telling the “story” can be therapeutic and healing. Burn survivors may tell people that they connect with on a deeper level the long version. It should be their right to decide. (Kammerer Quayle, Burn Support News, 2001)

The Hidden Burn

Burns that are not visible to the public because they are hidden by clothing can also cause concern to burn survivors. What will be the reaction if I wear a tank top, shorts or a swimsuit?? How will someone respond sexually?? Do I tell ‘em before I show ‘em? These are questions many worry about and there are no perfect answers.

People with hidden burns must also be “coached” about handling stares and the value of RYR so that have the ability to interact confidently. Each person has to work out the best method for his or her particular circumstance. This is far easier with the right “tools.”

Conversation starters…how to get started

“Feel the fear, and do it anyway.” Susan Jeffries

In new social situations when a burn survivor does not know anyone, beginning a conversation can be difficult. Some people find conversations easy while others experience shyness or awkwardness. Socializing is a skill to be learned and practiced just like a sport, an art, or a new job.

People with facial differences at times allow invasive thoughts to create a negative social experience. If one enters a new setting with self-talk that says, “No one will like me” or “No one will want to talk to me” then that is what will likely happen. We cannot assume that it is another’s responsibility to begin a conversation. It is also our responsibility.

Asking a question is an excellent way to begin a conversation with a stranger. Beginning a sentence with who, what, where, when, why, or how is an effective technique. If questions begin with these words, the person answering usually gives a response to generate additional conversation. Avoid asking questions that require only a “yes” or “no” answer because that often ends the conversation.

Think about the people who will be in the group you are meeting. Is it a PTA meeting, a new class, a waiting room, a sporting event, a religious function, or a club you have joined? In each instance, people are there for a common reason and a conversation can be built on that knowledge.
There are always the old standards such as: Where are you from? How far did you have to drive? What do you think of this weather? Conversation is part art and part science. If we look at it this way, the art of conversation can always be improved through study and practice.

For practice, ask patients to visualize being in new situations at work, school, or socially and not knowing anyone. Have them create possible “conversation starters” before they arrive. Whether we are speaking or listening, it is important to maintain eye contact, straight posture, a friendly tone of voice and a warm smile. Strangers are usually comfortable with persons who have a facial or body difference when they see and feel that they are comfortable with themselves.

**Image Enhancement: an adjunct to reconstructive surgery and rehabilitation**

*Adornment is never anything but a reflection of the self.*  Coco Chanel

Only 7% of communication is verbal, according to Jack Canfield, a national self-esteem expert. The remainder of communication is nonverbal. Therefore, it is important to realize that, in addition to eye contact, posture, and a smile, the use of corrective cosmetic techniques, harmonious colors, and clothing, are other important nonverbal “tools.” Hairstyles, eyeglasses, nails, shoes, teeth, jewelry and general grooming also transmit a nonverbal message.

Some people feel it is shallow to be concerned about image and appearance. They believe a person should not care what others think of their outer image. Experts on this subject concluded that people do pass judgment on others based upon initial impressions.

Rehabilitation therapists and mental health professionals of burn patients with facial and body difference must examine the issue of “image.” Many people without unique facial and body differences spend significant time and money to enhance their outer image. Some want to promote themselves in the work place or strive to interact more effectively in social situations. Others desire greater self-worth. Books, classes, and audio and videotapes are available on “dressing for success, creating a professional image, and “building greater self-confidence.” The able-bodied and “the beautiful people” enroll by the thousands to learn concepts and techniques that bring the rewards of an attractive personal appearance and more effective communication skills. These interventions are also available to those with facial and body differences and must be introduced as “tools” to help them as well.

How does a burn survivor create a positive image after one’s original image is changed? Improving my appearance with special cosmetics was never addressed during my rehabilitation or during my reconstructive surgeries. Feeling comfortable about my overall appearance was the goal, and the products and resources to attain my goal were mine to discover.

In contrast to burn care, the medical community treating cancer patients understands and supports patient concerns of image and appearance through the “Look Good Feel Better” programs. These programs are in most major cancer centers.
Graham and Kligman propose that people with facial differences suffer rejection more often than those with functional impairments. It seems that the needs of those with functional impairments are more easily accepted and understood. Some burn survivors give greater significance to cosmetic results than to increased function. In other words, how one looks may have greater importance than what one can do.

Burn survivors with a facial difference often suffer psychologically and socially. They anticipate plastic and reconstructive surgery with great hope. Many unrealistically hoped that surgery could restore us to our former image. Plastic and reconstructive surgeons can rebuild facial features and make amazing improvements in the ears, nose, eyelids, and general scar revision, but there are limitations. Exact symmetry is usually impossible in the lip and neck areas. Skin discoloration cannot be corrected through surgical procedures. In the words of Partridge, “disfigurement is only diminished (by surgery), not overcome.” At this point, using corrective cosmetics and other image techniques can improve one’s facial appearance.

Creative cosmetic techniques serve as an adjunct to reconstructive surgery. Using corrective cosmetics is a therapeutic aid for people with a facial difference. Research indicates that there are important psychological benefits for the cosmetic user. Use of cosmetics provides a beneficial affect on how others perceive a person and on self-perception. If the general population benefits from cosmetic techniques then burn survivors with skin discoloration, scars, asymmetrical lips, missing or sparse eyebrows can undoubtedly benefit. These techniques are helpful for both men and women. Providing this intervention increases self-confidence and eases community integration.

Creative cosmetic products are more opaque in texture and made from highly refined cosmetic wax. Regular consumer products are water based and will not adequately adhere to grafted or scarred skin.

Sharing a collection of before and after photographs and stories of others who have survived burn injuries enables burn survivors to see the possibilities for themselves. Graham and Kligman support the concept of learning corrective cosmetic techniques to aid individuals with a facial disfigurement.

**Creating a New “Normal”**

I wanted to “fit in” with the rest of the world. Skin grafts, skin discoloration, suture scars, lack of eyebrows, and an asymmetrical lip line presented numerous challenges. Application of a corrective cosmetic product to match my dominant skin tone enabled me to achieve a more harmonious complexion. I looked healthier and felt better about myself.

Burns completely destroyed my eyebrows. They are an important facial feature because they frame our eyes and reflect our emotions. The reconstructive surgeries to restore eyebrows I have seen look unnatural and unwieldy so I have declined that option. Instead, I draw them on with a fine pencil and eye shadow. This technique takes practice but provides a natural appearance that enhances facial symmetry and does not require surgery.
Permanent makeup artists who do tattooing can also recreate symmetrical eyebrows. Few have experience with grafted or scarred skin so considerable research is advised before proceeding with this technique.

The burn injury also changed the symmetry of my lips and reconstructive surgery could not correct the problem entirely. Creating a symmetrical lip line requires applying a corrective cosmetic product to conceal any scarred areas on and around the lips. Next, a quality cosmetic lip pencil is used to draw a symmetrical lip line. The final step is application of a harmonious lip color.

Learning to enhance and bring attention to attractive features such as the eyes also reduces the attention on a facial difference. When a burn survivor has even skin tones and similar facial features as others in society, community integration becomes easier and more comfortable. While my face is not as before, I am quite satisfied with my reflection in the mirror, and I choose to have no further reconstructive surgeries. It is my prayer that each person with a facial burn arrives at this stage of healing inside and out.

Figure 26-3 contains nine color photos of 4 burn survivors before the application of corrective cosmetic techniques and after application of corrective cosmetics.

**Color Analysis…helping the skin look healthier**

Color analysis is an image enhancement technique that produces immediate results. When I first saw this technique demonstrated at a burn survivor special interest group session at an American Burn Association meeting over 10 years ago, I was astonished by the results. The burn survivor being draped had a dramatic and positive change in appearance when harmonious colors of fabric were draped around her shoulders. The scars and skin discoloration were no longer the focal point of her face.

Pickney, an international expert and pioneer in the field of color analysis techniques, stated that colors worn near the face create an optimal appearance and an inner feeling of well being. Wearing clothing colors in harmony with skin tone, true hair color, and eye color diminishes the visibility skin discoloration, asymmetry and scars. Clothing colors worn close to the face that are not harmonious emphasize facial difference. Harmonious colors also make the eyes brighter and the teeth whiter. When a facial difference is not the primary focus of an observer’s attention, it improves community integration.

The colors that best enhance one’s appearance are based on a seasonal concept of wardrobe planning. Colors are divided into two types: warm and cool. The warm or cool concept is the universal basis for all color systems and theories. Color analysis uses a system of seasonal names (winter, summer, spring, and autumn) to divide colors. The colors are first divided by undertones; winter and summer possess a blue undertone; spring and autumn possess a yellow undertone. Winter and spring color are vivid and clear, summer and autumn are dusty and muted.
What'll I Wear Now?

Because of scarring on my back and arms from the burn and on my legs from skin used as donor sites, I felt limited in the clothing I could or would wear. I wore long sleeves both in winter and summer to hide my scars. Pants covered the scars on my legs. If I wore opaque hose, I would occasionally venture out in a skirt or dress. My style of dress indicated I did not love my body and wanted to hide it. No program was available to “coach” me about clothing and my fear of exposing my scars.

A healthy body image is essential to a positive self-image. Acceptance of a “new” self requires time, introspection, family and peer support, and healing. A fellow burn survivor frankly told me how foolish I looked in summer wearing long sleeves. He encouraged me to wear short sleeves like other people in southern California. He was right, and I took his advice. The peer support I received assisted me in making some big steps.

Eventually, I began to see the scars as a part of who I am. Finally I donned short sleeves, skirts, sheer hose, shorts, and even a swimming suit again. I consciously chose the clothes I wore keeping in mind the message they communicated about me in professional and a leisure settings. Many things about appearance that cannot be controlled but behavioral skills, clothing, and image choices are manageable.

A 1987 research project conducted among 94 managers reflects the impact of dress on job applicants who had a physical impairment. The results confirmed that the better the applicant was dressed, the higher the ratings in other areas such as competence and motivation. The managers determined the more appropriate the dress of the applicant, the more willing they would be to hire the person. This study reveals the importance of dressing appropriately. Burn survivors can learn to use clothing to their advantage. Dressing properly for one’s body type, life style, and personality is a learned skill. Books are available and as well as private image consultants. The expression “the best investment you can make is the investment you make in yourself” applies here.

Support Organizations

Helpful organizations make significant contributions to community integration and rehabilitation. Regional and local non-profit agencies in the United States offer assistance to burn survivors through support groups, camps, and retreats.

The Phoenix Society for Burn Survivors is the national organization dedicated to peer support, education, collaboration and advocacy. They act as a resource center and referral service to burn centers and other regional support organizations.

The Phoenix Society offers a wide variety of resources. Their quarterly publication Burn Support News provides vital information regarding burn care and recovery. It is received in every burn center in the United States.

Yearly they sponsor, in collaboration with local burn centers, an annual World Burn Congress. Burn survivors, families and health care professionals from across the globe attend. A wide educational program is offered dealing with many aspects of recovery. Many report it as a life-changing marker in their transition from victim to survivor. Health care
professionals find extreme value in obtaining first-hand information on living as a burn survivor.

The Phoenix Society created the **SOAR** (Survivors Offering Assistance in Recovery) Program, the first national peer support program, designed to provide standardized training for burn survivors or their families who want to volunteer to assist others whose lives have been affected by burns. This program makes it easier for burn centers to work with volunteers in providing peer support for their patients.

The Phoenix Society established a web site that acts as a resource center for both survivors and health care professionals. The web site can be reached at [www.phoenix-society.org](http://www.phoenix-society.org) or information is available by calling 1-800- 888-BURN.

Phoenix Educational Grants (**PEG**) scholarship program offers scholarships yearly to burn-injured students. Scholarships are awarded for attending college or a technical trade program.

Including a copy of **The Burn Support News** and web site information in every discharge packet can be a helpful ongoing support system. For patients living a distance from the burn center, this information can be a lifeline to needed support.

**Resource Materials for Professionals and Burn Survivors:**

Creating a library of motivational and inspirational books, videos and audiotapes for patients to borrow can assist community integration and increase quality of life. When thoughts change, actions have the potential of transforming to more enabling and functional practices.

**Books:**
- After Plastic Surgery adaptation and adjustment by Frances Cooke Macgregor
- Body images: A handbook of theory, research and practice. T. F. Cash & T. Pruzinsky (Eds.)
- The Body Image Workbook by Thomas F. Cash, Ph.D.
- Life Strategies Phillip C. McGraw, Ph.D.
- Color me Beautiful by Carole Jackson
- Healing Words by Larry Dossey, M.D.
- Life Strategies for Teens by Jay McGraw
- How to Handle Bullies, Teasers and Other Meanies by Kate Cohen-Posey, M.S. LMHC, LMFT
- Sticks and Stones 7 ways your child can deal with teasing, conflict and other hard times by Scott Cooper

**Videos:**
- “Reservoirs of Strength” A Burn Recovery Film
  Distributed by Lucid Media 818-764-8580
- “You Can Do It!! “ Community Reentry Skills for Children, Teens, and Adults with Burns.
  Distributed by: The Phoenix Society for Burn Survivors, Inc. 1-800-888-Burns

**Articles**
- Body images: A handbook of theory, research and practice. T. F. Cash & T. Pruzinsky (Eds.)
Health care providers have a tremendous influence on their patients. Those who model positive communication skills and a professional image will have a greater impact. Modeling teaches and supports patients in also creating healthy, positive images and helps them develop effective behavioral skills and attractive images.

Successful community integration, and discharge and after-care programs that promote it, must be a priority of all burn centers. The quality of life depends upon it for children, teens, and adults with burns. Burn survivors should not have to struggle alone without adequate support. The “tools” are there, and the programs and resources exist. It takes insight, courage and commitment to step forward and “make it happen” for the highest good of all and truly “affect the day.”

REFERENCES


**Figure Legends:**

Figure 26-1: The 5 STEPS to Social Comfort & Confidence

Figure 26-2: Rehearse your responses

Figure 26-3: A) and B) African American woman before and after use of corrective cosmetics and other enhancement techniques to cover skin discoloration and scarring. C) and D) Caucasian woman’s arm before and after use of corrective cosmetics and other enhancement techniques to cover skin discoloration and scarring. E), F) and G) Caucasian man before, ½ enhancement completed, and after use of corrective cosmetics to cover skin discoloration and scarring. H) and I) Caucasian woman before and after use of corrective cosmetics and other enhancements techniques to cover skin discoloration and scarring. Parkland Memorial Hospital Regional Burn Center Behavioral and Enhancement Training Team, Rebecca Myers, OTR, and Andra Sterzik, OTR