

The background features several axial MRI brain scans in shades of blue and white. Overlaid on these are various technical parameters and text, including 'FoV 199', '296', '512', 'Sag(1.5)', 'W 178', 'C 667', 'Tra>Cor(6.1)', 'ASGATI', '23 / 180', 'AF', 'Chilom', 'Hormon', '4VAT', 'MISS', 'STUDY 1', '1101', '16:41:56', '2 MA 18', 'RFP', '5cm', and 'R'.

NAVIGATING BURNOUT: AN INTROSPECTIVE AND SCIENTIFIC REVIEW OF BURNOUT IN MEDICAL IMAGING

Dr. LaKeidra Bell, Ed.D, R.T.(R)(ARRT)

Clinical Coordinator/Didactic Faculty

Baton Rouge General

Baton Rouge, Louisiana

LEARNING OBJECTIVES

After attending this live meeting, participants will be able to:

- ▶ **SUMMARIZE** the social and medical definition of and history of burnout.
- ▶ **EXPLAIN** the correlation between Maslow's hierarchy of needs and burnout.
- ▶ **IDENTIFY** and **DEFINE** the 3 domains of burnout.
- ▶ **EXPLAIN** how burnout affects those who work in the imaging sciences.
- ▶ **OUTLINE** effective treatment options for treating and managing RTs with burnout.

WHY BURNOUT?

- ▶ **Major crisis among healthcare professionals**
- ▶ **It can affect 3 aspects in radiologic imaging:**
 - ▶ **The Radiologic Technologist (RT)**
 - ▶ Threat to physical and mental health of the RT
 - ▶ RTs become fatigued, overwhelmed, and doubtful of their abilities
 - ▶ **The Patient**
 - ▶ Patients receive less-than-adequate care from burned out RTs, reducing patient satisfaction
 - ▶ **The Imaging Department**
 - ▶ Lack of patient care from the RT, decrease in finances for the department and organization, high employee turnover rate, lack of productivity coverage, and reduced employee morale

WHY BURNOUT?

- ▶ **This course will serve as an overview of the syndrome as well as:**
 - ▶ Signs and symptoms
 - ▶ Treatment options
 - ▶ The effects on the imaging department
- ▶ **Open doors for RTs to seek proper care and treatment**
- ▶ **To make organizations and departments aware**

FORMER BURNOUT SURVIVOR

- ▶ **Radiologic Vascular Technologist in Interventional Radiography**
 - ▶ Worked 8- to 12-hour shifts in addition to taking calls
- ▶ **Pursuing Master's Degree in Radiologic Sciences**
 - ▶ Completed comprehensive examinations to begin working on my thesis
- ▶ **Third trimester of pregnancy**
 - ▶ Low energy levels
- ▶ **Constantly juggling multiple obligations**
- ▶ **Extremely exhausted all the time**

HISTORY OF BURNOUT

- ▶ Introduced by psychiatrist Herbert Freudenberger
- ▶ The concept was developed based on his work in a NY treatment facility in 1971.
- ▶ Young motivated volunteers began to experience drastic changes:
 - ▶ Loss of energy
 - ▶ Motivation
 - ▶ Commitment to their work

HISTORY OF BURNOUT

- ▶ **“Burning cigarette” comparison**
- ▶ **Mental and behavioral signs and symptoms**
 - ▶ Difficulty suppressing feelings, feelings of irritation and frustration, and quick-to-anger responses
 - ▶ Feelings of extreme suspicion and paranoia, stubborn and inflexible attitudes, and acts of depression
- ▶ **Physical signs and symptoms**
 - ▶ Extreme exhaustion, fatigue, lingering/frequent colds, frequent headaches, gastrointestinal disturbances, sleeplessness, and shortness-of-breath
- ▶ **Volunteers were literally burning out**

HISTORY OF BURNOUT

- ▶ A psychological researcher, Christina Maslach, furthered Freudenberger's work.
- ▶ She discovered that burnout was prevalent among healthcare providers and social workers.
- ▶ She found that these types of workers felt emotionally exhausted because of their work.
- ▶ Their burnout caused cynical or negative feelings toward their clients or patients.
- ▶ Interviews revealed the emotional aspect of burnout rather than the physical aspect.

UNDERSTANDING BURNOUT

- ▶ When assessing burnout syndrome, the definitions may vary between the medically accepted definition and the more socially accepted definition.

MEDICAL DEFINITION OF BURNOUT

- ▶ A syndrome that occurs within individuals who work with other people, and it is a response to chronic emotional strain of dealing with other human beings, mostly when the other human being is troubled or needs help.

SOCIAL DEFINITION OF BURNOUT

- ▶ According to Maslach and Leiter, “Occupational burnout can be described as the index of dislocation between what people are and what they have to do, and it represents an erosion in values, dignity, spirit, and will — an erosion of the human soul.”

MASLACH BURNOUT INVENTORY

- ▶ **Maslach Burnout Inventory (MBI)**
- ▶ **Divides burnout into 3 domains:**
 1. Emotional exhaustion
 2. Depersonalization
 3. Low sense of personal accomplishment
- ▶ **The test determines the level of burnout the worker is experiencing.**
- ▶ **If 1 domain is left untreated, it can lead to the next domain.**

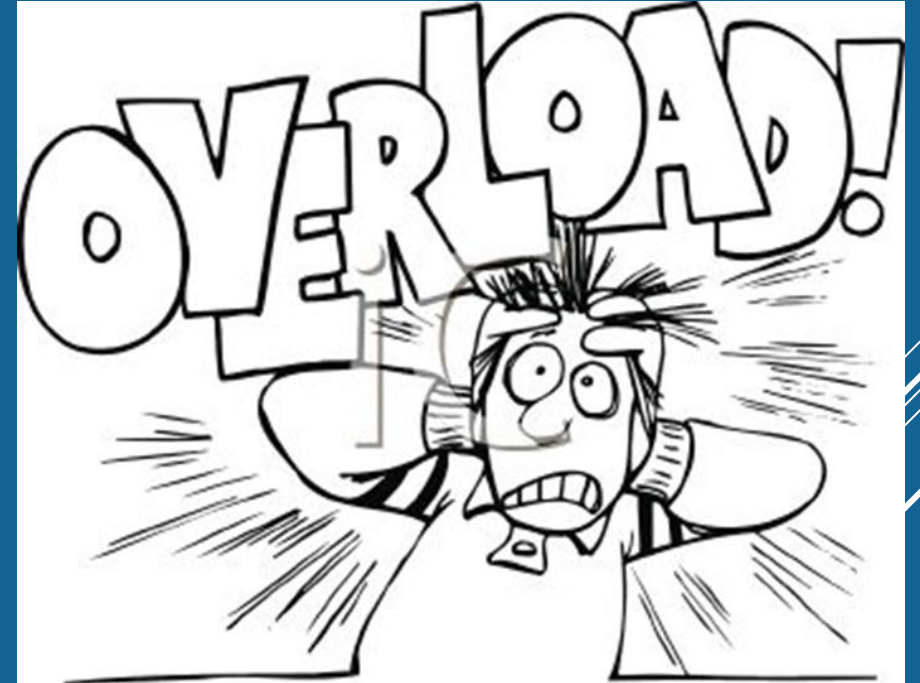
THE 3 DOMAINS OF BURNOUT

1. Emotional exhaustion
2. Depersonalization
3. Low sense of personal accomplishment

EMOTIONAL EXHAUSTION

▶ First Core Domain

- ▶ Response to emotional overload or overwhelming emotional demands
- ▶ Created by the individual's job or the recipient of the individual's help



EMOTIONAL EXHAUSTION

- ▶ So much is being asked of the individual mentally and physically on a daily basis, but nothing is given in return.
- ▶ This leads to a drain and depletion in mental and physical resources along with energy levels.

COPING MECHANISM

- ▶ Avoiding contact with other individuals to reduce the risk of emotional involvement
- ▶ This coping mechanism leads to the second domain:

DEPERSONALIZATION

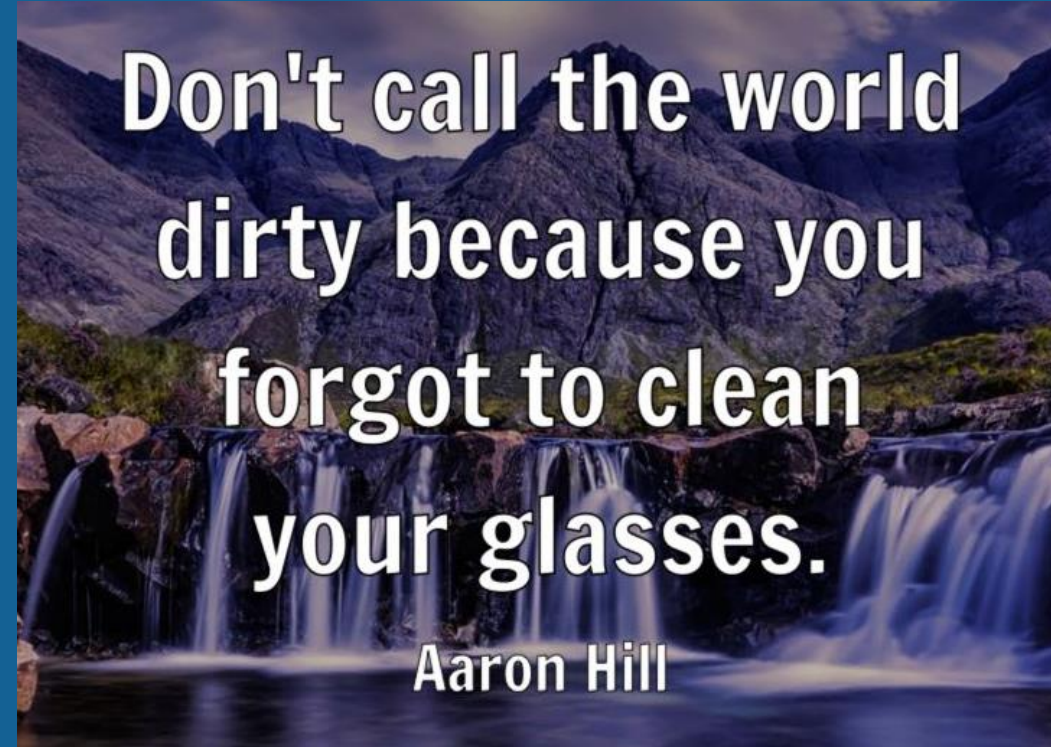
DEPERSONALIZATION

▶ **Second Domain**

- ▶ Cynical approach towards others
- ▶ Impaired or distorted reception of others that can manifest into a total lack of empathy
- ▶ Begins to view their patients as objects instead of people
- ▶ “Rust-colored glasses”

“RUST-COLORED GLASSES”

- ▶ Develops poor opinions about others
- ▶ Automatically expects the worst from others
- ▶ Develops a dislike for others



DEPERSONALIZATION FOR THE HEALTHCARE PROVIDER

- ▶ Dehumanizes patients; viewing them as objects instead of people
- ▶ Healthcare provider may not give the best care due to their distorted view and detached feelings
- ▶ Tends to put the patient down
- ▶ Refuses to be civil or courteous
- ▶ Disregards the patient's pleas or demands

DEPERSONALIZATION

- ▶ Progresses for so long, the negative feelings begin to reflect on the individual, leading to the third domain:

Low Sense of Personal Accomplishment

LOW SENSE OF PERSONAL ACCOMPLISHMENT

- ▶ **The individual moves into a phase where they feel as if they have failed in their profession.**
 - ▶ They feel inadequate about their abilities.
 - ▶ They doubt their choice of chosen profession.
 - ▶ Make statements such as:
 - ▶ “Maybe I am not cut out for this type of work.”
 - ▶ They reflect on the RT they started out as at the beginning of their career and where they are now.
 - ▶ Can lead to severe depression due to degradation of self-esteem

SIGNS OF BURNOUT

- ▶ **Early stages are hard to detect before progressing to a point of crisis.**
 - ▶ Interventions are rare.
- ▶ **Healthcare providers often suppress their feelings.**
 - ▶ Always the provider of healthcare, never the receiver
- ▶ **Treatment is sought only when burnout becomes extreme.**
 - ▶ The healthcare provider poses a threat to patients and themselves.

SIGNS OF BURNOUT

▶ Physical responses

- ▶ Headaches, dizziness, increased sweating, blurred vision, aching neck and shoulders, skin rashes, and lower resistance to infection and illness

▶ Psychological responses

- ▶ Loss of temper, low self-esteem, depression, anxiety, mood swings, and job dissatisfaction

▶ Behavioral responses

- ▶ Loss of concentration, sleeplessness, overindulgence in coping mechanisms such as smoking, alcohol, or drugs, and lack of motivation

SIGNS OF BURNOUT

- ▶ Low energy levels
- ▶ Mood and personality changes
- ▶ Working more and accomplishing less

LOW ENERGY LEVELS

- ▶ **Depletion of mental and physical resources**
 - ▶ Causes a constant state of fatigue
 - ▶ Lingering drained feeling
- ▶ **“Depletion Syndrome”**

“DEPLETION SYNDROME”

- ▶ **Healthcare providers push themselves to complete college.**
 - ▶ **Example: Staying up all night or late multiple nights to study**
- ▶ **This drive continues and intensifies on a professional level.**
- ▶ **Healthcare providers constantly ignores their body’s limitations to avoid feeling weak or incompetent.**

MOOD AND PERSONALITY CHANGES

Healthcare Provider

- ▶ Idealistic
- ▶ Charismatic
- ▶ Optimistic

Burnout

- ▶ Angry
- ▶ Irritable
- ▶ Short-tempered

MOOD AND PERSONALITY CHANGES

- ▶ Due to the disconnect between ideal expectations the healthcare provider possessed at the start of their journey and the harsh reality of how their journey is progressing or ending

WORKING MORE AND ACCOMPLISHING LESS

- ▶ Overworks to achieve a goal
- ▶ Ignores limitations and refuses to cut back or takes shortcuts to their goal
- ▶ Once the goal is achieved, the reward is not as great as the individual hoped for.

WHAT CAUSES BURNOUT?

STRESS

CAUSES OF BURNOUT

- ▶ **Burnout is the reaction to unrelieved stress.**
- ▶ **This has become a common health hazard among RTs.**
- ▶ **Stress is inevitable in the healthcare profession.**
- ▶ **It is brought on by the imbalance of the social exchange or human connection.**
- ▶ **The main source of stress leading to burnout stems from occupational sources.**

OCCUPATIONAL STRESSORS

- ▶ **Occupational Relationships**
 - ▶ Patients
 - ▶ Coworkers
 - ▶ Supervisor, management, or administration
- ▶ **Organizational stressors**

OCCUPATIONAL RELATIONSHIPS – PATIENTS

- ▶ The give-and-take relationship becomes misconstrued (caregiver is constantly giving and not receiving).
- ▶ The caregiver is constantly bombarded with patients and patient problems and ailments.
- ▶ Patients are not always amicable.
- ▶ Patients can be severely ill, rude, uncooperative, and anxious about their health or illness.
- ▶ Healthcare providers are expected to suppress their own feelings on a regular basis, provide care, and remain ethical.
- ▶ Can encounter stressed patients who make examinations difficult by not following instructions
- ▶ Patients become stressed and frustrated without the understanding that the RT cannot provide a diagnosis.

OCCUPATIONAL RELATIONSHIPS – COWORKERS

- ▶ **Spends more time in the work setting with coworkers or members of a healthcare team**
- ▶ **Leads to emotional exhaustion and cynical behavior towards people**
- ▶ **Competition can arise for positions, bonuses, and promotions, which increases stress**
 - ▶ **Can lead to backstabbing behaviors and putting down other members of the team**
 - ▶ **Causes coworkers to alienate themselves from each other**
- ▶ **Can no longer provide support, comfort, or a helping hand to their coworkers to prevent the onset of burnout**

OCCUPATIONAL RELATIONSHIPS – SUPERVISORS, MANAGEMENT, OR ADMINISTRATION

- ▶ Supervisors can alleviate stress and burnout, but they often do not.
- ▶ They often contribute to an RT's stress by:
 - ▶ Leaving negative feedback on evaluations
- ▶ Lack of positive reinforcement
- ▶ Lack of trust and faith in supervisor(s)
 - ▶ Feelings that management is not on their side and will agree with the opposing side
 - ▶ Management will not provide relief or a solution
 - ▶ Feels out of reach if RTs encounter problems or need help
- ▶ Focuses only on productivity or numbers instead of RTs and patients

ORGANIZATIONAL STRESSORS

- ▶ **According to Maslach: People tend to focus on the *Who* of burnout and disregard the *What* of burnout, such as a job or organization.**
- ▶ **Some of the causes (or “What”s) of burnout may include:**
 - ▶ Rotating shifts, administering contrast injections to patients, and radiation exposure
 - ▶ Restricting policies and procedures
 - ▶ Forcing RTs to perform unpleasant tasks with little-to-no direction
 - ▶ Time constraints or pressures on the healthcare provider to meet expectations
 - ▶ Poor management
 - ▶ Encourages role ambiguity and role conflict
 - ▶ New technology
 - ▶ RTs can be resistant to new technology and software
 - ▶ Familiar processes are being disturbed, lack of computer literacy, lack of training, no effective communication, and an overdependence on technology

RISK FACTORS

Who is at risk for burnout?

RISK FACTORS – PROFESSIONALLY

- ▶ Professionals in the “helping” profession
- ▶ Human service workers
 - ▶ Healthcare providers and social workers

RISK FACTORS – PERSONALITY CHARACTERISTICS

- ▶ **Set of personality characteristics that can cause stress in each domain of burnout.**
- ▶ **Emotional exhaustion**
 - ▶ Weak and submissive personality traits
 - ▶ Passive in the healthcare provider-to-patient relationship and are easily overburdened
- ▶ **Depersonalization**
 - ▶ Easily angered or intolerant
 - ▶ Trouble controlling hostile impulses and tend to project their impulses onto their patients
- ▶ **Low sense of personal accomplishment**
 - ▶ Lacks self-confidence or ambition
 - ▶ Does not have a clear set of goals or career path and are constantly faced with self-doubt
 - ▶ Lack determination to set goals or even achieve them

RISK FACTORS – DEMOGRAPHICS

- ▶ **Sex/Gender**
- ▶ **Ethnic background**
- ▶ **Age**
- ▶ **Marital and family status**
- ▶ **Education**

SEX/GENDER

- ▶ **Both men and women experience burnout!**
 - ▶ Different domains
- ▶ **Women are more susceptible to emotional exhaustion.**
 - ▶ They are often emotionally involved with their job.
 - ▶ Sociable and sensitive
- ▶ **Men are more likely to encounter depersonalization.**
 - ▶ Callous nature
 - ▶ Expected to be hard, tough, and unemotional

ETHNIC BACKGROUND

- ▶ **Caucasians: More likely to experience burnout**
 - ▶ Vast majority of any group
- ▶ **African-Americans are not exempt from burnout**
 - ▶ They are the least likely to experience emotional exhaustion and depersonalization.
 - ▶ More of a sense of comradery amongst each other
 - ▶ Prepared to deal with emotionally charged situations due to experiences with poverty and discrimination
 - ▶ More balanced with their work and possess a more realistic perspective about work and who they work with

AGE

Young Healthcare Professionals

- ▶ More susceptible to burnout during their first few years in the healthcare profession.
- ▶ Easily angered by things outside of their control
- ▶ Tend to leave the profession prematurely

Older Healthcare Professionals

- ▶ More stable and mature
- ▶ They have a more balanced perspective on life and career.
- ▶ Previous survivors of burnout
- ▶ Established more work support and personal connections with peers

MARITAL AND FAMILY STATUS

- ▶ **Single and childless or divorced healthcare providers are more at risk**
 - ▶ Likely to experience all 3 domains
- ▶ **Married providers:**
 - ▶ Experienced with handling problems and conflict
 - ▶ Emotional resources outside of work
 - ▶ Constant source of approval and affection
 - ▶ Less likely to seek approval from coworkers
 - ▶ More focused on job security, salary, and benefits

EDUCATION

- ▶ Healthcare providers who have completed college experience all 3 domains of burnout
- ▶ High levels of education = high expectations for career
- ▶ Not fully prepared for the reality of their role
 - ▶ Gap between goals and actual achievements

BURNOUT AND RADIOLOGY

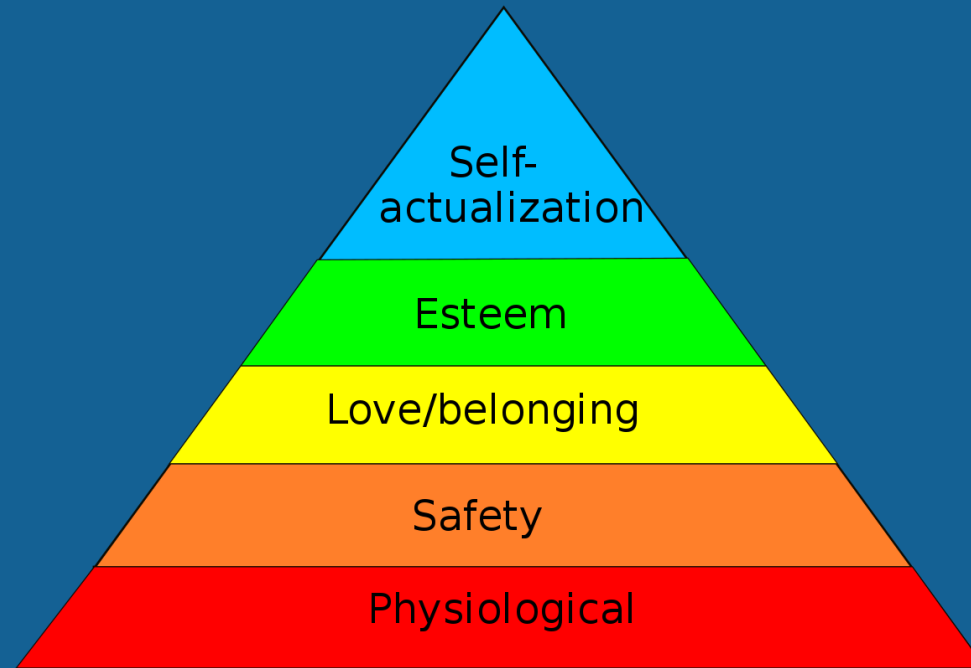
**What does burnout have to do
with radiology?**

BURNOUT AND RADIOLOGY FACTS

▶ Radiology

- ▶ One of the main departments within an organization to experience the effects of burnout
- ▶ Radiologists are among the top 10 physicians to experience burnout the most
 - ▶ Approximately 49%
- ▶ RTs are highly susceptible to burnout
 - ▶ High level of multitasking
 - ▶ Performs examinations quickly and accurately
 - ▶ Constantly exposed to patient problems

MASLOW'S HIERARCHY OF NEEDS



PHYSIOLOGICAL NEEDS

▶ Basic Needs

- ▶ Needed for human survival
- ▶ Must be met or the individual cannot function

▶ Food, Water, and Rest

- ▶ Burnout tends to prevent fulfillment of these needs
- ▶ Emotionally exhausted state → No adequate sleep or rest
- ▶ Hectic schedules → No eating or lack of balanced diet

SAFETY

- ▶ Basic need
- ▶ Needed for human survival
- ▶ Protection, stability, and freedom from fear
- ▶ Burnout threatens an individual's well being and patients' well being → Constant state of fear
- ▶ Fear of death or personal loss
- ▶ Stability is interrupted and career is no longer secure due to burnout

LOVE AND BELONGING

- ▶ Friendship, trust, acceptance, and being part of a group
- ▶ Burnout sufferers constantly seek approval and acceptance.
- ▶ They devote time and energy to everyone else's demands for fear of rejection and being pushed out of a group.
- ▶ When the same devotion is not reciprocated, burnout can occur, and the individual can become isolated.
 - ▶ Hinders relationships and connections
 - ▶ Lack of trust

ESTEEM

- ▶ **Achievement, independence, dominance, self-respect, and respect from others**
- ▶ **Sufferers of burnout lack esteem for themselves and others.**
- ▶ **Individuals with burnout are emotionally depleted.**
 - ▶ **Cannot meet the requirements the “helping relationship” requires**
- ▶ **Individuals with burnout lack a sense of achievement in their goals.**
- ▶ **They are overburdened by their situation and feel as if they lack control.**

SELF-ACTUALIZATION

- ▶ **Realizing personal potential, self-fulfillment, and seeking personal growth**
- ▶ **Low sense of personal accomplishment**
 - ▶ **Feel inadequate regarding their career**
 - ▶ **Feel negatively about themselves as if they will fail**
 - ▶ **Depression**
- ▶ **This need is usually apart of the intervention or treatment process.**

BURNOUT AND THE RADIOLOGY DEPARTMENT

- ▶ RTs
- ▶ Coworkers
- ▶ Patients
- ▶ Department

BURNOUT AND THE RT

- ▶ **Low contributions to the department**
- ▶ **Low job performance**
- ▶ **Health issues**
 - ▶ **Hypertension**
 - ▶ **Coronary distress**

BURNOUT AND THE RT

- ▶ **Psychological impairment**
 - ▶ Depression
 - ▶ Low self-esteem
 - ▶ Self-blame
 - ▶ Self-destructive behavior
- ▶ **Premature ending of career**

BURNOUT AND COWORKERS

- ▶ Experience withdrawal from burned out coworkers
- ▶ Severed personal connections and relationships
- ▶ Hostile workplace

BURNOUT AND PATIENTS

- ▶ **Dehumanized treatment**
- ▶ **Poor care and treatment**
 - ▶ Receive little to no empathy

BURNOUT AND THE DEPARTMENT

- ▶ Low performance ratings
- ▶ Low employee morale
- ▶ Increased absenteeism
- ▶ High turnover rates
- ▶ Finances are affected

TREATMENT

- ▶ Individual
- ▶ Social
- ▶ Organizational

INDIVIDUAL TREATMENT

- ▶ **Become self-aware**
 - ▶ “Self-Awareness Process”
- ▶ **Proceed through assessment screening**
 - ▶ The American Institute of Stress’ The Workplace Stress Scale – a screening and measuring tool developed in 1998.
 - ▶ Perceived Stress Scale

INDIVIDUAL TREATMENT

- ▶ **“Self-Awareness Process”**
 - ▶ Began to know yourself
 - ▶ *Who am I as a person?*
 - ▶ *Why did I choose healthcare as a profession?*
 - ▶ Rest and relax
 - ▶ Healthy lifestyle changes
 - ▶ Set realistic goals based on limitations
 - ▶ Time management
 - ▶ Additional training

SOCIAL SUPPORT/TREATMENT

- ▶ **Supportive workplace relationships**
 - ▶ Having someone to rely on during stressful situations
 - ▶ Companionship
 - ▶ Create friendships outside of work

- ▶ **Peer support groups or coaching**
 - ▶ Help in crisis
 - ▶ Insight
 - ▶ Comfort

ORGANIZATIONAL TREATMENT

- ▶ **Provide more resources so providers can do their job more effectively**
 - ▶ Divide work evenly amongst staff
- ▶ **Reassure staff of their value**
 - ▶ Formal vs Informal
- ▶ **Host workshops to improve coworker relations**
- ▶ **Utilize intervention programs**
 - ▶ Mindfulness Base Stress Reduction Program (MBSR)

TREATMENT

- ▶ **Optimal solution**
 - ▶ Career change

CONCLUSIONS

- ▶ The overall goal of this presentation is to identify the effects burnout has on imaging professionals and imaging departments. The hope is that this information can become a guide for RTs so that they can recognize and effectively deal with burnout within themselves or others around them.
- ▶ This information is also beneficial to radiology departments and healthcare organizations. By being aware of burnout and its symptoms, the department can prevent or help alleviate the effects of burnout within their department, stop the premature ending of RTs' careers, and boost employee morale by providing the help needed by anyone suffering from burnout.
- ▶ Through RTs receiving proper treatment and developing coping mechanisms, radiology departments and imaging facilities can ensure that RTs are providing their patients with the best possible care while ensuring patient safety.

Any Questions?

Thank You!

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