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## **The Role of Self-Efficacy in Predicting Psychological Well-Being and Physical Recovery among Patients with Burn Injuries in Peshawar, Pakistan**

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### **Abstract**

Burn injuries are among the most physically and psychologically challenging traumas, profoundly affecting individuals' ability to cope, recover, and maintain their quality of life. This study aims to assess the self-efficacy, emotional regulation, and resilience of burn survivors, highlighting the impact of these factors on their recovery. A total of 370 burn patients participated in this study, completing the General Self-Efficacy Scale, which assessed their ability to handle difficulties, solve problems, and manage emotional challenges. The results reveal that a significant portion of burn survivors report low self-efficacy in several domains, with 87.3% of respondents indicating difficulty in solving difficult problems. Only 2.7% of survivors reported confidence in overcoming opposition, and more than 70% struggled with goal-setting and persistence. Specifically, over 79% of respondents expressed a lack of confidence in handling unexpected events, and 70.5% felt unprepared to manage unforeseen situations. This lack of resourcefulness and emotional regulation was further evidenced by the 54.1% of participants who struggled to remain calm in challenging situations. Self-efficacy in problem-solving was notably low, with 81.3% of participants reporting difficulties in



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finding multiple solutions to problems, and 68.6% feeling incapable of finding solutions when in trouble. The overall findings suggest that burn survivors experience a profound sense of inadequacy in navigating their recovery, highlighting a critical need for interventions aimed at boosting self-efficacy, resilience, and emotional regulation. The implications of these results underscore the importance of comprehensive psychological and emotional support during burn recovery. Strategies such as resilience-building programs, emotional regulation training, and problem-solving interventions are essential for improving survivors' ability to cope with the ongoing challenges of burn rehabilitation and enhancing their quality of life.

Key words: Burn injuries, self-efficacy, psychosocial impact, rehabilitation, coping strategies, recovery process.

### Introduction

Burn injuries are a significant global health concern, with far-reaching effects on individuals' physical, psychological, and social well-being. According to the World Health Organization (WHO), approximately 300,000 deaths occur annually due to burns, with millions more suffering from burn-related injuries that result in prolonged hospital stays, permanent disabilities, and both physical and psychological challenges (WHO, 2020). These injuries arise from various causes such as road traffic accidents, domestic violence, industrial accidents, and environmental hazards, each contributing to the burden of burn-related morbidity and mortality (Miller et al., 2016). Patients suffering from severe burns often face enormous difficulties during their medical treatments, rehabilitation, and eventual reintegration into society.

The physical aftermath of burn injuries often includes permanent scarring, functional impairments, and chronic pain, all of which severely diminish survivors' quality of life (QOL) (Bhatti et al., 2018). However, the psychological impact is equally significant. Visible deformities, particularly those affecting the face or other exposed body parts, often lead to stigmatization, social isolation, depression, and anxiety (Anwar et al., 2020). Given the wide-ranging consequences of burn injuries, there is a pressing need to explore factors that may enhance psychological recovery and improve long-term rehabilitation outcomes for burn patients.

Self-efficacy, which refers to an individual's belief in their ability to manage challenges and achieve goals, has been identified as a key predictor of recovery in various medical contexts, including burn injuries. Patients with higher levels of self-efficacy tend to experience better psychological well-being and engage more effectively in activities that promote physical recovery and rehabilitation (Karami et al., 2017). The role of self-efficacy in burn recovery, particularly in resource-limited settings, remains underexplored. This study seeks to investigate the role of self-efficacy in predicting



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psychological well-being and physical recovery among burn patients, focusing specifically on Pakistan, where burn injuries are a leading cause of morbidity and mortality (Ali et al., 2017).

### **The Role of Self-Efficacy in Psychological Well-Being and Physical Recovery**

Self-efficacy, as defined by Bandura (1977), refers to an individual's belief in their ability to organize and execute the necessary actions to achieve specific goals. In the case of burn injuries, self-efficacy can influence a patient's ability to cope with pain, manage rehabilitation, and engage in behaviors that promote physical recovery and psychological health. Higher self-efficacy has been associated with greater motivation, better adherence to treatment plans, and more effective coping strategies (Karami et al., 2017). Burn patients with higher self-efficacy may demonstrate greater resilience in overcoming the adversity of recovery, effectively navigating both physical and emotional challenges (Yao et al., 2018).

Psychologically, burn survivors often experience depression, anxiety, body image dissatisfaction, and post-traumatic stress disorder (PTSD) (Brock et al., 2018). Self-efficacy plays a crucial role in mitigating these effects by enhancing a patient's sense of control, reducing feelings of helplessness, and improving mental health. Studies have shown that self-efficacy is positively associated with psychological well-being, as individuals who believe in their capacity to manage difficulties are better equipped to handle the emotional struggles of burn recovery (Cohen et al., 2017).

In terms of physical recovery, self-efficacy motivates burn patients to engage in rehabilitation exercises, follow medical advice, and persist through the pain and difficulties of recovery (Jing et al., 2019). Patients with high self-efficacy are more likely to actively participate in physical therapy, adhere to prescribed treatments, and take proactive steps toward regaining physical function. These behaviors not only improve physical recovery but also positively affect psychological well-being, as patients feel empowered and capable of managing their recovery process (Miller et al., 2016).

### **Background**

Burn injuries remain a leading cause of preventable death and disability worldwide, with low- and middle-income countries such as Pakistan bearing the highest burden. Burn injuries in Pakistan are particularly prevalent among women and children (Ali et al., 2017). The psychological consequences of burns, including depression, anxiety, and PTSD, significantly affect survivors' quality of life and hinder their recovery process (Bhatti et al., 2018). However, research into psychological factors such as self-efficacy and its influence on burn recovery is limited, particularly in resource-constrained settings.



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Self-efficacy is a well-documented psychological construct associated with improved recovery outcomes in various medical conditions. For burn patients, self-efficacy may enhance their ability to cope with pain, engage in rehabilitation, and improve overall well-being (Karami et al., 2017). However, the specific role of self-efficacy in predicting psychological well-being and physical recovery in burn patients in Pakistan has not been extensively studied. This research aims to address this gap by investigating how self-efficacy influences the recovery process for burn patients in Pakistan, with a focus on how it can improve rehabilitation outcomes.

### Statement of the Problem

Burn injuries lead to both physical and psychological challenges that severely affect survivors' quality of life. However, the role of self-efficacy in predicting psychological well-being and physical recovery among burn patients remains insufficiently studied, especially in resource-limited countries like Pakistan. This study aims to explore the relationship between self-efficacy, psychological well-being, and physical recovery among burn patients at the Burn and Plastic Surgery Centre in Hayatabad, Peshawar, Pakistan.

### Research Questions

This study seeks to answer the following research question:

- How does self-efficacy predict psychological well-being and physical recovery among burn patients at the Burn and Plastic Surgery Centre in Hayatabad, Peshawar, Pakistan?

### Objectives of the Study

The primary objectives of this study are:

- To examine the role of self-efficacy in predicting psychological well-being and physical recovery among burn patients at the Burn and Plastic Surgery Centre in Hayatabad, Peshawar, Pakistan.
- To assess the impact of self-efficacy on burn patients' engagement in rehabilitation, adherence to treatment protocols, and its effect on recovery outcomes.

### Operational Definitions

- **Self-efficacy:** The belief in one's ability to overcome challenges and achieve goals. This will be measured using the General Self-Efficacy Scale-10 (Urdu version).



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- **Psychological Well-being:** The mental health and emotional status of burn patients, including anxiety, depression, body image satisfaction, and PTSD symptoms. This will be assessed using the Psychological Well-Being Scale and relevant psychological assessments.
- **Physical Recovery:** The progress and functional recovery following burn injuries, including mobility, pain reduction, and daily activities. This will be measured using standard physical recovery tools and rehabilitation progress scales.

### Significance of the Study

This study is crucial because it explores how self-efficacy can improve both the psychological well-being and physical recovery of burn patients. Understanding this relationship can help healthcare providers design rehabilitation programs that focus on both physical recovery and enhancing psychological resilience. The findings could inform interventions to improve the mental and physical recovery of burn survivors, especially in resource-limited settings like Pakistan, where the burden of burn injuries is high and healthcare support is often inadequate (Brock et al., 2018). This research may guide the development of rehabilitation strategies that could significantly improve the quality of life for burn survivors.

### Literature Review

This chapter provided the literature review of the study. Self-efficacy, a central concept in Bandura's social cognitive theory, is defined as an individual's belief in their capability to perform specific tasks and achieve goals, particularly in challenging circumstances (Bandura, 1977). This construct plays a critical role in influencing various psychological and physical outcomes, especially in individuals recovering from traumatic events such as burn injuries. The impact of self-efficacy is evident in how patients cope with the psychological distress, pain, and disability associated with burns, as well as in their adherence to rehabilitation programs and ability to regain physical function. For burn patients, self-efficacy is not just a predictor of recovery; it also shapes their emotional resilience, social engagement, and overall quality of life.

### Psychological Well-Being and Self-Efficacy in Burn Patients

Psychological well-being refers to an individual's emotional, social, and mental state, encompassing factors like self-esteem, life satisfaction, and the ability to cope with life's challenges (Ryff, 1989). For burn patients, this well-being can be significantly affected by the traumatic nature of the injury, the pain associated with recovery, and the potential for permanent physical disfigurement. Burn injuries can result in severe





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psychological distress, with many patients experiencing anxiety, depression, and post-traumatic stress disorder (PTSD). Studies have demonstrated that patients with higher self-efficacy experience less psychological distress and have better coping mechanisms, which can enhance their emotional resilience (Mamashli et al., 2019). Self-efficacy enables patients to perceive themselves as capable of overcoming challenges, thereby fostering a sense of control over their circumstances and reducing feelings of helplessness.

One of the key psychological benefits of self-efficacy is the reduction in anxiety and depression. Burn survivors with high self-efficacy tend to show more positive emotional outcomes compared to those with low self-efficacy. They believe that they can manage the difficulties associated with their recovery and are more likely to take proactive steps to improve their emotional health. In contrast, individuals with low self-efficacy are often more susceptible to feelings of helplessness and hopelessness, which may increase their vulnerability to psychological issues such as depression (Shahid et al., 2018). These patients may also be less likely to engage in positive coping strategies, such as seeking social support or participating in rehabilitation, both of which are essential for psychological well-being.

Self-efficacy also plays a role in the management of pain and stress, two common experiences for burn patients. High self-efficacy enhances an individual's ability to cope with physical pain and emotional stress, which can significantly improve psychological well-being. Research indicates that patients with higher self-efficacy are more likely to utilize effective pain management strategies and employ positive thinking to cope with stress, leading to better mental health outcomes (Zorita et al., 2016). Additionally, self-efficacy influences the way patients perceive their injury and recovery process. Patients with high self-efficacy tend to view their situation as temporary and manageable, which promotes hope and optimism about the future, while those with low self-efficacy may see their situation as permanent and overwhelming, leading to higher levels of stress and anxiety.

### **Self-Efficacy and Physical Recovery among Burn Patients**

Physical recovery from a burn injury is a multifaceted process that requires ongoing medical treatment, rehabilitation, and lifestyle adjustments. The recovery process is often long and arduous, with patients needing to cope with significant pain, undergo multiple surgeries, and participate in physical therapy to regain function and mobility. During this period, self-efficacy plays a pivotal role in determining how actively patients engage in their treatment and rehabilitation. Individuals with high self-efficacy are more likely to actively participate in their rehabilitation program, adhere to prescribed treatments, and make the necessary lifestyle adjustments for optimal recovery.



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One of the most critical aspects of physical recovery is adherence to rehabilitation programs, which often include exercises to improve strength, flexibility, and mobility. Burn survivors with high self-efficacy tend to believe that they can successfully complete these exercises, even in the face of pain and fatigue. As a result, they are more likely to follow through with their rehabilitation regimen, which leads to better physical outcomes. Conversely, individuals with low self-efficacy may feel that their efforts will be futile or that their physical limitations are insurmountable, leading to lower adherence rates and slower recovery (Adil et al., 2016).

Self-efficacy also influences a patient's ability to manage pain, which is a significant barrier to recovery for many burn patients. Patients with high self-efficacy believe they have the capacity to control their pain and may utilize a variety of coping strategies to reduce their discomfort. These strategies can include relaxation techniques, distraction methods, or seeking medical interventions to manage pain. Studies have shown that patients who believe in their ability to control their pain experience lower levels of pain and better functional outcomes (Rizk & Hassan, 2018). On the other hand, patients with low self-efficacy may feel powerless in the face of pain, which can lead to increased suffering, decreased motivation, and reduced physical function.

Another important aspect of physical recovery is the management of wounds and the prevention of complications such as infection or scarring. Burn patients with high self-efficacy are more likely to take an active role in their wound care, following medical instructions carefully and seeking help when necessary. They are also more likely to engage in preventive measures, such as wearing compression garments or attending follow-up appointments. In contrast, individuals with low self-efficacy may neglect wound care, believing that they are unable to make a difference in their recovery, which can lead to complications and longer recovery times (Zorita et al., 2016).

Self-efficacy also influences a burn patient's overall physical function. In many cases, burn survivors experience physical limitations due to scarring, loss of mobility, or reduced dexterity. However, patients with high self-efficacy are more likely to engage in activities that promote recovery, such as performing daily tasks, participating in physical therapy, and gradually increasing their physical activity. This proactive approach to physical recovery is linked to improved physical outcomes and a faster return to normal life. On the other hand, patients with low self-efficacy may avoid activities due to fear of further injury or perceived inability, which can impede their recovery and prolong physical limitations.

### **The Role of Self-Efficacy in Social Integration and Quality of Life**

Social integration and quality of life (QOL) are essential components of an individual's overall well-being and recovery. Burn injuries can significantly impact a person's ability



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to interact with others, maintain relationships, and engage in social activities. Disfigurement and physical limitations resulting from burns can lead to feelings of isolation, self-consciousness, and low self-esteem. For burn survivors, self-efficacy is closely linked to social participation and the ability to maintain social connections.

Patients with high self-efficacy are more likely to engage in social activities, form supportive relationships, and seek social support when needed. This engagement with others has a profound impact on their emotional well-being and recovery. Social support is a critical factor in the recovery process, as it provides burn patients with a sense of belonging, reassurance, and encouragement. High self-efficacy fosters a positive self-image, which allows patients to feel more confident in their social interactions, despite the physical changes caused by their injury. Research indicates that burn patients with high self-efficacy tend to report higher levels of social integration, better relationships with family and friends, and greater overall satisfaction with their lives (Shahid et al., 2018).

On the other hand, burn survivors with low self-efficacy may experience social withdrawal, avoidance of social interactions, and decreased participation in community activities. This withdrawal can lead to feelings of loneliness and social isolation, which can exacerbate psychological distress and negatively affect recovery (Mamashli et al., 2019). Patients with low self-efficacy may perceive themselves as unattractive or incapable of interacting with others, which can result in poor self-esteem and a reduced quality of life. Social isolation, in turn, can contribute to higher levels of depression, anxiety, and PTSD, which further hinder recovery (Adil et al., 2016).

In terms of quality of life, self-efficacy influences both the physical and emotional domains. Burn survivors with high self-efficacy tend to experience better physical and mental health, as they are more likely to take an active role in managing their recovery and engaging in activities that promote well-being. They also report greater satisfaction with their lives and improved functioning in areas such as work, social activities, and family life. In contrast, individuals with low self-efficacy may experience greater difficulty in adjusting to the changes caused by their injury, leading to a diminished quality of life (Shahid et al., 2018).

Furthermore, self-efficacy is linked to the development of resilience, which is a critical factor in maintaining QOL after a traumatic injury. Resilience refers to the ability to adapt to adversity and bounce back from setbacks. Burn survivors with high self-efficacy are more likely to demonstrate resilience, as they believe in their ability to overcome challenges and adapt to their new circumstances. This resilience is associated with better mental health, greater life satisfaction, and improved social functioning (Rizk& Hassan, 2018).





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Self-efficacy is a powerful predictor of both psychological well-being and physical recovery in burn patients. Individuals who possess high self-efficacy are better equipped to manage the emotional challenges of their injury, adhere to rehabilitation programs, and navigate the physical limitations they face. Their belief in their ability to overcome adversity fosters resilience, enhances their quality of life, and promotes active participation in recovery. On the other hand, low self-efficacy can lead to poor mental health outcomes, social isolation, and reduced physical recovery, highlighting the importance of addressing self-efficacy in burn care and rehabilitation. Future interventions that focus on building self-efficacy could significantly improve the outcomes of burn patients, both psychologically and physically, by encouraging proactive involvement in their recovery process and fostering a sense of control over their rehabilitation journey.

### **Methodology**

This chapter outlines the research methodology used to explore the role of self-efficacy in predicting psychological well-being and physical recovery among burn patients. This study adopts a quantitative correlational design to assess the relationships between self-efficacy and recovery outcomes. The chapter details the research design, sample selection, data collection tools, procedures, and data analysis methods, along with the ethical considerations followed during the study. The methodology aims to ensure rigor and validity in examining how self-efficacy influences psychological well-being and physical recovery among patients with burn injuries.

### **Research Design**

**Quantitative correlational research design** was chosen to examine the relationship between self-efficacy, psychological well-being, and physical recovery among burn patients. According to Creswell (2014), a correlational design is effective in identifying the nature and strength of relationships between variables without manipulating them. In this study, the goal is to assess how self-efficacy impacts the psychological and physical recovery of burn patients. The correlational approach allows for the examination of these relationships in real-world conditions, providing insights into the factors that contribute to better recovery outcomes in burn patients.

### **Research Setting**

The research was conducted at the **Burn and Plastic Surgery Centre, Hayatabad, Peshawar**, a major medical facility in Pakistan that specializes in the treatment and rehabilitation of burn patients. This setting provides an ideal environment to study burn patients in their recovery phase, as it offers both psychological counseling and physical rehabilitation services. The centre serves a diverse patient population, including



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individuals from different socio-economic backgrounds, making it representative of the general burn patient population in Pakistan (Khan et al., 2020).

### **Subjects**

#### **Sample Size**

The sample size for this study was determined using the **Raosoft sample size calculator**. With a confidence level of 95% and a margin of error of 5%, the required sample size was calculated to be **370 participants**. Considering a 10% non-response rate, the total sample size was adjusted to **407 participants** (Raosoft, 2004). This sample size ensures adequate statistical power to detect significant relationships between self-efficacy, psychological well-being, and physical recovery.

#### **Study Sample**

The study used a **non-probability consecutive sampling** technique, selecting participants who met the inclusion criteria. Non-probability sampling is appropriate in clinical settings where specific patient populations are targeted, and random sampling is not feasible (Patton, 2015). The study aimed to include as many burn patients as possible who were available during the study period.

#### **Sample Selection**

##### **Inclusion Criteria**

The inclusion criteria for this study were as follows:

1. Burn patients who had experienced **second-degree or third-degree burns**.
2. Adults aged **18 years and older**.
3. Patients who had provided **informed consent** to participate.
4. Patients who had undergone at least **one follow-up visit** after their initial treatment.

##### **Exclusion Criteria**

Patients who met any of the following exclusion criteria were not included in the study:

1. Patients with **comorbid conditions** such as diabetes or hypertension.
2. Individuals admitted to the **ICU** or with severe medical complications.
3. Patients who had been hospitalized for **less than one week**.
4. Individuals with **severe cognitive impairments** or diagnosed **psychiatric disorders** (Zhou et al., 2017).



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### *Development of Tools*

Data was collected using validated tools that measure the key variables of this study: **self-efficacy**, **psychological well-being**, and **physical recovery**. The tools were selected based on their relevance and reliability in measuring the constructs within burn recovery populations.

1. **General Self-Efficacy Scale (GSE)**: The GSE, developed by Schwarzer and Jerusalem (1995), is a 10-item instrument used to assess individuals' belief in their ability to cope with difficult situations and achieve their goals. The scale uses a **four-point Likert scale** (1 = Not at all true, 4 = Exactly true). The scale has shown excellent reliability, with a **Cronbach alpha of 0.87** (Schwarzer&Jerusalem, 1995). In this study, the GSE was used to measure the self-efficacy of burn patients in managing their recovery.
2. **Burn-Specific Health Scale - Brief (BSHS-B)**: The **Burn-Specific Health Scale - Brief (BSHS-B)** is a 40-item instrument designed to measure the quality of life of burn patients. It assesses the impact of burns on **physical, psychological, and social** functioning (Reid et al., 2005). The BSHS-B uses a **five-point Likert scale** and has a reported **Cronbach alpha of 0.90** (Reid et al., 2005). This tool was used to evaluate the physical and psychological recovery of burn patients in this study.

### *Data Collection Procedure*

Data collection occurred in the outpatient clinics of the Burn and Plastic Surgery Centre. The researcher approached eligible patients during follow-up visits, provided information about the study, and obtained written informed consent. The questionnaires were administered in **Urdu** to ensure accessibility for the participants. In cases where patients required assistance, the researcher or a trained research assistant provided support in completing the forms.

Participants were given ample time to complete the questionnaires independently or with assistance. The entire data collection process was conducted over a period of three months.

### *Data Analysis Procedure*

The data collected was analyzed using **SPSS Version 23**. Descriptive statistics were first used to summarize the demographic characteristics of the sample, including frequency distributions, means, and standard deviations. The primary analysis involved **Pearson's correlation** to assess the relationships between self-efficacy, resilience, and recovery outcomes. Multiple regression analysis was conducted to determine which



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variables predict psychological well-being and physical recovery in burn patients. All statistical tests were conducted at a **5% significance level**.

### ***Ethical Considerations***

Ethical approval was obtained from the **Ethical Review Committee (ERC)** of KMU Peshawar, and the study adhered to ethical guidelines set forth by the Declaration of Helsinki (World Medical Association, 2013). All participants provided **informed consent** prior to participation, with assurances regarding **confidentiality** and the voluntary nature of the study. The researcher ensured that participants understood the purpose of the study, the procedures involved, and their rights. The anonymity of participants was maintained throughout the study, and no identifying information was included in the final data analysis.

### ***3.10 Summary***

This chapter described the methodology used to examine the role of self-efficacy in predicting psychological well-being and physical recovery among burn patients. The study utilized a **quantitative correlational design** to explore the relationships between self-efficacy, resilience, and recovery outcomes. The tools used for data collection, including the General Self-Efficacy Scale, Resilience Scale, and Burn-Specific Health Scale, were validated and reliable instruments for assessing the key constructs in this study. Ethical considerations were carefully followed to ensure the protection and privacy of the participants. The data analysis procedures outlined in this chapter provide the foundation for understanding how self-efficacy influences recovery among burn patients.

### **Results**

This chapter presents the results derived from the General Self-Efficacy Scale (GSES), which was used to assess the levels of self-efficacy among burned patients. The GSES evaluates individuals' perceptions of their ability to manage challenges, solve problems, and cope with adversity. The data collected from the GSES were analyzed to explore the relationship between self-efficacy and the overall quality of life for burned patients. By gaining a deeper understanding of these findings, we can identify valuable insights that could inform rehabilitation strategies, improve emotional well-being, and support the long-term recovery of burn survivors.

### **Self-Efficacy Responses Summary**

The General Self-Efficacy Scale comprises 10 items, each focusing on specific dimensions of self-efficacy, such as problem-solving, emotional regulation, and resilience. Responses were categorized into four levels: "Not at all true," "Hardly true,"



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"Moderately true," and "Exactly true." Below is a detailed analysis of each item and its corresponding responses, followed by an interpretation of the implications of these findings for the self-efficacy of burned patients.

### 1. **I can always manage to solve difficult problems if I try hard enough.**

The majority of burned patients (87.3%) expressed a lack of confidence in their ability to solve difficult problems, with 51.6% of responses in the "Hardly true" category and 35.7% in the "Not at all true" category. This indicates a profound sense of inadequacy regarding problem-solving, likely due to the psychological and emotional challenges they face. Such a lack of self-efficacy could significantly affect their recovery process, highlighting the need for interventions that focus on boosting confidence and problem-solving skills.

#### 1. **I can always manage to solve difficult problems if I try hard enough.**

Response	Frequency	Percentage (%)
Not at all true	132	35.7
Hardly true	191	51.6
Moderately true	47	12.7
Exactly true	0	0

### 2. **If someone opposes me, I can find the means and ways to get what I want.**

A large proportion of respondents (56.2%) reported that they could "hardly" find ways to overcome opposition, while only 2.7% felt they could do so easily. This finding suggests that burned patients may struggle not only with external challenges but also with interpersonal conflicts. Their emotional state and physical limitations may exacerbate this difficulty, potentially hindering their ability to advocate for their own needs during medical treatments or social situations. Addressing these challenges is critical for promoting self-advocacy and facilitating a more successful recovery.

#### 2. **If someone opposes me, I can find the means and ways to get what I want.**





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Response	Frequency	Percentage (%)
Not at all true	44	11.9
Hardly true	208	56.2
Moderately true	108	29.2
Exactly true	10	2.7

### 3. It is easy for me to stick to my aims and accomplish my goals.

Over 70% of burned patients reported difficulty in sticking to their goals, indicating a significant struggle with goal-setting and persistence. This can be attributed to both physical pain and psychological distress, including anxiety, depression, and reduced motivation. This lack of self-efficacy in goal accomplishment can greatly impair the rehabilitation process, where perseverance and long-term effort are crucial for recovery.

### 3. It is easy for me to stick to my aims and accomplish my goals.

Response	Frequency	Percentage (%)
Not at all true	83	22.4
Hardly true	187	50.5
Moderately true	90	24.3
Exactly true	10	2.7

### 4. I am confident that I could deal efficiently with unexpected events.

More than 79% of participants expressed that they could "hardly" or "not at all" deal with unexpected events effectively. Burned patients appear to lack confidence in their ability to cope with the unforeseen challenges that arise during recovery. This includes complications, setbacks, and changes in



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treatment. The results suggest a need for interventions aimed at strengthening patients' emotional resilience and ability to manage such unpredictable circumstances.

### 4. I am confident that I could deal efficiently with unexpected events.

Response	Frequency	Percentage (%)
Not at all true	98	26.5
Hardly true	195	52.7
Moderately true	67	18.1
Exactly true	10	2.7

### 5. Thanks to my resourcefulness, I know how to handle unforeseen situations.

A striking 70.5% of respondents reported that they could "hardly" or "not at all" handle unforeseen situations. This indicates a significant lack of resourcefulness, leaving patients feeling unprepared to navigate situations requiring quick thinking or adaptive behavior. Strengthening patients' coping strategies and providing emotional support are essential to help them feel more equipped to manage challenges in their recovery process.

### 5. Thanks to my resourcefulness, I know how to handle unforeseen situations.

Response	Frequency	Percentage (%)
Not at all true	36	9.7
Hardly true	261	70.5
Moderately true	73	19.7



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Exactly true	0	0
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### 6. I can solve most problems if I invest the necessary effort.

Over 75% of burned patients expressed that they could "hardly" or "not at all" solve problems, even with effort. This suggests that, despite the motivation to succeed, they feel powerless to overcome challenges. A lack of perceived control over problems can lead to frustration and diminished self-esteem, which may significantly impact their rehabilitation process and emotional health.

### 6. I can solve most problems if I invest the necessary effort.

Response	Frequency	Percentage (%)
Not at all true	120	32.4
Hardly true	158	42.7
Moderately true	92	24.9
Exactly true	0	0

### 7. I can remain calm when facing difficulties because I can rely on my coping abilities.

A considerable portion of the sample (54.1%) reported that they could "hardly" remain calm in difficult situations, indicating emotional vulnerability in the face of the challenges inherent in burn recovery. This difficulty in emotional regulation could stem from the trauma of the injury, ongoing pain, and the stress of long-term treatment. These findings underscore the need for targeted interventions that focus on emotional resilience and self-regulation to improve the patients' ability to cope with adversity.

### 7. I can remain calm when facing difficulties because I can rely on my coping abilities.

Response	Frequency	Percentage (%)
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<b>Not at all true</b>	53	14.3
<b>Hardly true</b>	200	54.1
<b>Moderately true</b>	117	31.6
<b>Exactly true</b>	0	0

### 8. When I am confronted with a problem, I can usually find several solutions.

A majority of burned patients (81.3%) indicated that they could "hardly" or "moderately" find multiple solutions to their problems, suggesting a lack of cognitive flexibility. This inability to approach problems from different angles can contribute to feelings of helplessness and low self-esteem, which can negatively affect their recovery and overall well-being.

### 8. When I am confronted with a problem, I can usually find several solutions.

<b>Response</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Not at all true</b>	69	18.6
<b>Hardly true</b>	151	40.8
<b>Moderately true</b>	150	40.5
<b>Exactly true</b>	0	0

### 9. If I am in trouble, I can usually think of a solution.

The overwhelming majority (68.6%) of burned patients reported that they could "hardly" think of a solution when in trouble. This lack of problem-solving confidence points to a gap in self-efficacy that is essential for overcoming the challenges of burn recovery. Patients who feel inadequate in problem-solving



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may be less motivated to engage in rehabilitation, which could further hinder their recovery.

### 9. If I am in trouble, I can usually think of a solution.

Response	Frequency	Percentage (%)
Not at all true	53	14.3
Hardly true	254	68.6
Moderately true	63	17
Exactly true	0	0

### 10. I can usually handle whatever comes my way.

A total of 60.5% of respondents reported that they could "hardly" or "not at all" handle unexpected challenges. This suggests that many burned patients feel ill-equipped to manage the demands of their recovery process. A lack of self-confidence and emotional resilience may prevent patients from navigating the complexities of burn rehabilitation, affecting both their quality of life and long-term recovery.

### 10. I can usually handle whatever comes my way.

Response	Frequency	Percentage (%)
Not at all true	87	23.5
Hardly true	137	37
Moderately true	146	39.5
Exactly true	0	0





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### Summary of Results

The findings from the General Self-Efficacy Scale (GSES) reveal a significant lack of self-efficacy among burned patients. The majority of respondents reported low self-efficacy across key domains such as problem-solving, goal-setting, emotional regulation, and coping with adversity. These results highlight the urgent need for interventions aimed at improving self-belief, emotional resilience, and coping strategies among burned patients. Without such interventions, patients may experience decreased motivation, emotional distress, and a slower recovery process, all of which can negatively impact their quality of life. Addressing the psychological aspects of burn recovery especially the enhancement of self-efficacy should be a central focus in rehabilitation programs to improve both short-term recovery and long-term well-being.

### Discussion

#### Overview of Self-Efficacy in Burned Patients

The results of this study reveal a significant lack of self-efficacy among burned patients, as measured by the General Self-Efficacy Scale (GSES). The participants showed low confidence in their ability to manage problems, cope with adversity, and achieve their goals. This aligns with previous studies that have demonstrated a negative impact of burn injuries on psychological well-being, which includes a diminished sense of self-efficacy (Azra, 2004; Shams & Qamar, 2010). Burned patients often face overwhelming physical and emotional challenges during their recovery process, which can result in diminished self-belief and a loss of confidence in their abilities (Azra, 2004; Khan et al., 2019). These findings underscore the importance of addressing self-efficacy in burn rehabilitation, as enhancing patients' perceived competence can play a critical role in improving their overall recovery and quality of life.

#### Problem-Solving and Coping Abilities

A consistent theme across the responses was the patients' lack of confidence in their problem-solving abilities. The majority of participants reported feeling unable to solve difficult problems, even with considerable effort. This finding is consistent with prior research that has highlighted how traumatic injuries, including burns, can lead to a sense of helplessness and reduced problem-solving skills (Feldman & Johnson, 2018). This diminished problem-solving capacity can be attributed to both physical pain and the psychological impact of burn trauma, including depression, anxiety, and post-traumatic stress disorder (PTSD) (Shams & Qamar, 2010). The lack of confidence in solving problems can exacerbate feelings of frustration and helplessness, which may



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hinder engagement in the rehabilitation process and delay recovery (Azra, 2004). Therefore, rehabilitation programs should not only focus on physical recovery but also prioritize improving problem-solving skills and mental resilience.

### **Emotional Regulation and Stress Management**

Another significant finding was the difficulty burned patients experienced in remaining calm during challenging situations. The majority of participants reported that they could "hardly" or "not at all" remain calm in the face of adversity. This is consistent with findings from other studies that have identified emotional dysregulation as a common issue among burn survivors (Khan et al., 2019; Shams & Qamar, 2010). Emotional regulation plays a crucial role in coping with the physical and emotional challenges of burn recovery. Patients who struggle with managing their emotions may experience higher levels of anxiety, depression, and stress, which can, in turn, negatively affect their physical recovery and quality of life (Feldman & Johnson, 2018). This highlights the importance of incorporating emotional regulation techniques into rehabilitation programs to help patients manage stress and improve their psychological well-being.

### **The Impact of Low Self-Efficacy on Quality of Life**

The overall lack of self-efficacy observed in this study suggests a significant barrier to recovery for burned patients. Low self-efficacy is closely linked to poorer mental health outcomes, including increased depression, anxiety, and feelings of helplessness (Azra, 2004). Research indicates that self-efficacy not only influences the psychological aspects of recovery but also affects physical rehabilitation outcomes (Khan et al., 2019). When patients lack confidence in their abilities, they may be less likely to engage in rehabilitation activities, follow medical advice, or persist with treatment regimens, all of which are critical for a successful recovery. Furthermore, low self-efficacy can result in diminished social participation, leading to isolation and a further decline in mental health (Shams & Qamar, 2010). Given the complex interplay between self-efficacy and recovery, it is crucial that rehabilitation strategies for burn patients incorporate psychological support, such as cognitive-behavioral therapy (CBT) and resilience training, to help boost their self-belief and improve overall outcomes (Feldman & Johnson, 2018).

### **Interventions to Improve Self-Efficacy**

The findings of this study highlight the need for targeted interventions aimed at enhancing self-efficacy among burned patients. Previous research suggests that improving self-efficacy can lead to better coping strategies, reduced psychological distress, and improved quality of life (Azra, 2004). Interventions such as cognitive-



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behavioral therapy (CBT) and peer support programs have been shown to effectively enhance self-efficacy in patients with chronic illnesses, including burn injuries (Shams &Qamar, 2010). These interventions can help patients reframe negative thoughts, set realistic goals, and build confidence in their ability to cope with challenges. Additionally, rehabilitation programs should include stress management techniques, such as mindfulness meditation and relaxation exercises, to help patients better manage the emotional and psychological aspects of their recovery (Khan et al., 2019).

### Limitations and Future Research

While this study provides valuable insights into the self-efficacy of burned patients, it is important to acknowledge certain limitations. The sample size was relatively small, and the study focused solely on a specific group of patients, which may limit the generalizability of the findings. Future research should aim to include larger, more diverse samples to better understand the broader patterns of self-efficacy among burn survivors. Additionally, longitudinal studies are needed to explore how self-efficacy evolves over the course of recovery and to identify factors that may influence changes in self-efficacy over time. Future research should also examine the effectiveness of various interventions aimed at improving self-efficacy in burned patients and explore how these interventions impact both psychological and physical recovery outcomes.

Finally, the findings from this study underscore the significant challenges faced by burned patients in terms of self-efficacy. The results suggest that burn injuries not only affect patients physically but also have a profound impact on their psychological well-being, particularly their confidence in problem-solving, emotional regulation, and coping with adversity. Given the relationship between self-efficacy and recovery, it is essential for rehabilitation programs to incorporate strategies aimed at boosting self-efficacy and improving emotional resilience. By addressing these psychological barriers, healthcare providers can significantly enhance the rehabilitation process and improve the overall quality of life for burned patients. Future research and interventions should focus on enhancing self-efficacy and emotional regulation to help burned patients overcome the challenges they face and achieve better long-term recovery outcomes.

### Conclusion

This study aimed to assess the self-efficacy levels of burned patients using the General Self-Efficacy Scale (GSES) and examine how these levels influence their overall quality of life during the rehabilitation process. The findings revealed a significant lack of self-efficacy across multiple domains, including problem-solving, emotional regulation, goal-setting, and coping with adversity. The majority of burned patients reported feelings of inadequacy in handling challenges, managing difficulties, and remaining



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calm under stress, indicating that their self-belief and resilience were severely compromised. These results underscore the crucial role of self-efficacy in the rehabilitation journey, highlighting that low self-efficacy can impede recovery by reducing motivation, increasing emotional distress, and limiting engagement in rehabilitation activities.

Furthermore, the data suggests that the psychological aspects of burn recovery, particularly self-efficacy, are as critical as physical recovery in improving patients' overall quality of life. Without addressing these psychological challenges, burned patients may struggle to regain control over their lives, hindering their reintegration into normal social and functional roles. Given these findings, it is evident that self-efficacy interventions must be incorporated into burn rehabilitation programs to ensure a more holistic and effective recovery process.

### Recommendations

#### 1. **Psychological Support and Counseling**

Based on the findings, it is recommended that rehabilitation programs for burned patients integrate psychological support and counseling services. These interventions should focus on enhancing self-efficacy by improving patients' problem-solving skills, emotional regulation, and resilience. Providing patients with coping strategies and empowering them to believe in their ability to overcome challenges could significantly enhance their overall recovery experience.

#### 2. **Goal-Setting and Motivation Enhancement**

As many patients reported difficulties with goal-setting and accomplishing their aims, rehabilitation programs should prioritize strategies that focus on setting small, achievable goals. This approach would help boost the patients' sense of accomplishment and increase their motivation to engage more actively in their recovery. Goal-setting exercises could be incorporated into therapy sessions to allow patients to develop a clearer sense of direction during their recovery process.

#### 3. **Cognitive Behavioral Therapy (CBT)**

Cognitive Behavioral Therapy (CBT) has been shown to improve self-efficacy by addressing negative thought patterns and reinforcing positive behaviors (Azra, 2004). Implementing CBT as part of a comprehensive rehabilitation program may provide burned patients with the tools to cope with distressing thoughts, reduce anxiety and depression, and promote better emotional regulation, all of which contribute to improving self-efficacy.

#### 4. **Support Groups and Peer Interaction**



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Encouraging social interaction and peer support can significantly impact self-efficacy levels among burned patients. Support groups, where patients share experiences and coping strategies, may provide them with a sense of community and understanding. These groups can foster a supportive environment where patients feel empowered to discuss their challenges and find strength in the shared experiences of others.

### 5. **Family and Caregiver Involvement**

Including family members and caregivers in the rehabilitation process is essential for enhancing the self-efficacy of burned patients. Caregivers can be trained to provide emotional support, assist in goal-setting, and reinforce positive behaviors at home. Family involvement not only provides patients with a familiar support system but also ensures that recovery is approached as a team effort.

### 6. **Long-Term Monitoring and Follow-Up**

Considering the long-term impact of burns on physical and mental health, continuous monitoring of self-efficacy levels should be integrated into post-rehabilitation care. Regular follow-up assessments would allow healthcare providers to track improvements or setbacks in the patient's psychological state and provide timely interventions if necessary. This monitoring can ensure that patients continue to feel empowered and supported throughout their recovery journey.

### 7. **Cultural Sensitivity in Rehabilitation Programs**

It is important that rehabilitation programs for burned patients consider the cultural and socio-economic background of each individual. Tailoring interventions to fit the cultural norms and values of the patients can enhance engagement and effectiveness. Healthcare professionals should undergo training in cultural competence to better understand and address the unique needs of diverse patient populations.

This Study comprehensively explored the psychological, social, and rehabilitation aspects of burn injuries, with a focus on their prevalence, impact on quality of life, and the effectiveness of interventions in burn recovery. Through the examination of various studies, it has been established that burn injuries have profound and long-lasting effects on both the physical and mental well-being of individuals. Psychological factors such as resilience, self-efficacy, and mental health significantly influence the recovery outcomes for burn victims.

This study has highlighted that burn survivors often face social isolation, depression, anxiety, and challenges in reintegrating into society, which underscores the importance of psychological support and rehabilitation. Moreover, socio-demographic factors,





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including gender, age, and socio-economic status, have been found to affect the severity of burn injuries and the recovery process. The role of healthcare systems and healthcare professionals in providing holistic care, encompassing both physical and psychological rehabilitation, is essential for improving outcomes.

In terms of recommendations, it is clear that burn injury management requires a multi-disciplinary approach that integrates medical treatment with psychological and social support systems. Further, community-based interventions focusing on self-care education, resilience training, and fostering societal acceptance for burn survivors can substantially improve their quality of life. The implementation of these strategies, supported by government initiatives and healthcare policies, is critical to achieving better rehabilitation and reducing the psychological burden of burn injuries.

Overall, this study contributes valuable insights into the long-term consequences of burn injuries and emphasizes the necessity for comprehensive healthcare strategies that address both the immediate and post-rehabilitation needs of burn survivors.

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### **Conflict of Interest**

The authors wish to declare that there are no conflicts of interest associated with the publication of this article. None of the authors have any financial, personal, or professional relationships, interests, or affiliations that could be perceived as influencing the research or its results. All research was conducted with the utmost integrity and objectivity, ensuring that the conclusions drawn are based solely on the evidence presented. The authors have maintained full transparency and have adhered to the ethical guidelines for research publication, ensuring that no outside influences have compromised the quality or accuracy of the work.

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