

# Effectiveness of Information Booklet on Knowledge Regarding Emotional Hygiene among Women

Veena D. Sakhardande

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## Abstract

**Abstract:** Emotional hygiene is about noticing your feelings and tending to your psychological health, just as you would practice good physical hygiene with brushing your teeth or showering each day, you can also benefit from small daily practices that keep your mind balanced.

**Purpose:** The purpose of the study was to assess the effectiveness of information booklet on knowledge regarding emotional hygiene among women.

**Method and Material:** The study approach was quantitative with study design pre-experimental study on women from the selected areas. The sample size was 120 women aged between 25-60 years, having full-time, part-time job & home makers. The sample selection technique was used non-probability purposive sampling technique. The tool used for data collection was a self-structured questionnaire that contained demographic variables in section I, section II related assessment of the knowledge regarding emotional hygiene before & after administration of information booklet on emotional hygiene among women. The written informed consent was taken from the participants prior to the data collection, in order to establish reliability of the tool, the inter-rater method was used.

**Result:** The result before administration intervention shows that, 49.1% of women had a good knowledge regarding emotional hygiene, 39.6% of women had an average knowledge regarding emotional hygiene and 11.3% of them with a poor knowledge regarding emotional hygiene where as after the intervention 77.7% of women had a good knowledge regarding emotional hygiene, 16.2% of women had an average knowledge regarding emotional hygiene and 5.9% of women with a poor knowledge regarding emotional hygiene. It also shows that there was significant association with education at 0.05 level of significance.

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**Conclusion:** The information booklet on emotional hygiene was helpful and found effective to maintain emotional balance and a work life balance.

**Keywords:** Emotional Hygiene; Working Women; Knowledge; Information Booklet, Non-experimental Study Design.

## INTRODUCTION

Emotions and Emotional hygiene are inter connected, very important aspect of mental health as compared with physical health. Doing What

Matters in Times of Stress: An Illustrated Guide is a stress management guide for coping with adversity. The guide aims to equip people with practical skills to help cope with stress. A few minutes each day are enough to practice the self help techniques. The guide can be used alone or with the accompanying audio exercises.<sup>1</sup>

Just like you clean your teeth, you need to cleanse your emotions. Emotional hygiene refers to being mindful of our stresses, emotional traumas, suffering and pain. Adopt daily monitors to deal with psychological pain and wounds when you sustain them. Emotional hygiene, just like daily brushing of teeth, requires daily focus, time and energy. The Dalai Lama urges people to get rid of disturbing emotions like anger, frustration, anxiety.<sup>2,3</sup>

### Need of the Study

Women play a very crucial role in their personal and professional life, imagining a family without the presence of the women is absolutely impossible. Women are capable in every aspect, right from doing household activities and leading a family, to becoming an entrepreneur and leading an organization, to becoming a political leader and leading its people. Women have shown an extraordinary performance in all these fields.<sup>2,3</sup>

Emotional support is one of the major factors contributing to emotional hygiene as it helps to maintain a healthy and trust worthy relationship with others. When women are considered they are the ones who need emotional support than men. Emotional support from the family members and co-workers help women to relieve their stress, disappointments, anxiety, somatization, pain and make them to live a peaceful and smooth life. Studies have shown a significant relationship between emotional support and emotional intelligence.<sup>4</sup>

The prevalence rate shows that 26% of women were most prone to stress and 66% of them were somewhat prone to stress, 35% of women showed high anxiety level. Women are experiencing various performance biases in the work place when compared to other co-workers, and also married women are unaware about the importance of emotional hygiene as they lack decision making skills and problem solving method and sometimes are not able to cope up with situation. In this study, it was clear that the anxiety and somatization are high in adult women who are married. The main reason for these disorders is family history, perception of illness and hypertension. An important contributing factor for the somatization

disorder is menstrual problems, cardiac illness and history of surgeries. As dividing these factors, the components of anxiety were the status of being single, adverse life circumstances (such as drug use), sleep problems and history of surgeries. So women deserve immediate attention because they suffer a lot from emotional imbalance. A study conducted in the year 2019 makes it clear that 77% of married women are experiencing emotional imbalance.<sup>1,5</sup>

### Aim of the Study

The aim of the study was to assess the effectiveness of information booklet on knowledge regarding emotional hygiene among women from selected areas of Pune city.

## MATERIAL AND METHODS

The study approach was a quantitative with study design pre-experimental study on women from the selected areas. The sample size was 120 women aged between 25-60 years, having full-time, part-time job & home makers. The sample selection technique was used non-probability purposive sampling technique. The tool used for data collection was a self-structured questionnaire that contained demographic variables in section-I, section-II related assessment of the knowledge regarding emotional hygiene before & after administration of information booklet on emotional hygiene among women. The written informed consent was taken from the participants prior to the data collection, in order to establish reliability of the tool, the inter-rater method was used.

## RESULT

### Section - I

**Table 1:** Demographic variable

Demographic Characteristics	Frequency	N=120
		Percentage
<i>Age</i>		
21-30 yrs	14	12%
31-40 yrs	28	23%
41-50 yrs	65	54%
51-60 yrs	10	8%
61-70 yrs	3	3%
<i>Education</i>		
Primary school	11	9%
High school	34	28%
Graduate	42	35%
Postgraduate	29	24%

*table cont...*

Ph.D	4	3%
<b>Type of family</b>		
Joint	37	31%
Nuclear	83	69%
<b>Occupation</b>		
Private service	70	58%
Govt. service	16	13%
Self employed	18	15%
Farmer	3	3%
Home maker	10	8%
Retired	3	3%

Table 1 shows the age wise distribution of women i.e., majority 54% belong to the age group of 41-50 years. Marital status distributed as majority. Educational status distributed as majority 35% women were graduate. Type of family 69% nuclear, Occupations of majority of women in private sector were 58%.

**Knowledge on emotional hygiene before and after intervention**

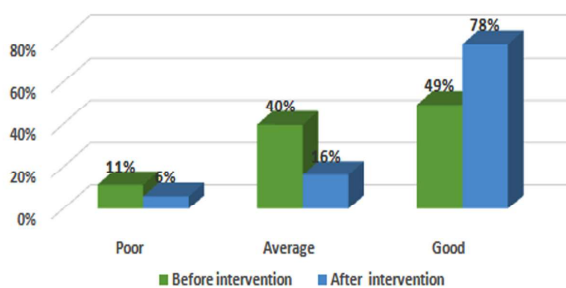


Fig. 1 & Table 2, The result before administration intervention shows that, 49.1% of women had a good knowledge regarding emotional hygiene, 39.6% of women had an average knowledge regarding emotional hygiene and 11.3% of them with a poor knowledge regarding emotional hygiene whereas after the intervention 77.7% of women had a good knowledge regarding emotional hygiene, 16.2% of women had an average knowledge regarding emotional hygiene and 5.9% of women with a poor knowledge regarding emotional hygiene. It also shows that there was significant association with education at 0.05 level of significance.

**Section-II**

N-120

Assessment of the knowledge regarding emotional hygiene before & after administration of information booklet on emotional hygiene among women.

Knowledge level	Before intervention	After intervention
Poor	11.3%	5.9%
Average	39.6%	16.2%
Good	49.1%	77.7%

**DISCUSSION**

The findings of the study were discussed with the objectives and hypothesis of the present study, which was under taken to assess the knowledge of emotional hygiene among women before and after intervention. 77.7% of women had a good knowledge regarding emotional hygiene, 16.2% of women had an average knowledge regarding emotional hygiene and 5.9% of women with a poor knowledge regarding emotional hygiene.<sup>6,7</sup>

The findings of the study conducted in 2021 are similar to our present study, which shows that working women have greater work life balance, with 59.4% of them having high level of emotional intelligence.<sup>8</sup>

A self-made questionnaire was developed, and it was distributed to the group of working women. The findings show that 76% of these women receive enough support from their family members.<sup>9</sup>

**CONCLUSION**

The information booklet on emotional hygiene was helpful and found effective to maintain emotional balance and a work life balance.

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*Conflict of Interest:* The author certify that she have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

*Ethical Approval:* Ethical approval is given by Intitutional research & recommendation committee, Bharati Vidyapeeth (Deemed to be University), College of Nursing, Pune.

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# Effectiveness of Ventilator Bundle Care Checklist on Prevention of Ventilator Associated Pneumonia

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## Abstract

Lung and breathing problems are common and 5th leading cause of death in worldwide. In India, the respiratory disorder stands in the 3rd place including COPD, asthma, pneumonia, tuberculosis etc. When a patient is unable to maintain a patent airway, adequate gas exchange or both, more invasive support with intubation and mechanical ventilation is needed to save the life of patient. Mechanical ventilation is a method to mechanically assist or replace spontaneous breathing, the most used mode of life support in medicine today, but it is not without complications. Physiologic complications associated with mechanical ventilation include ventilator induced lung injury, cardiovascular compromise, pneumothorax and the most importantly ventilator associated pneumonia.

**Keywords:** Ventilator Induced Lung Injury; Cardiovascular Compromise; Pneumothorax; Pneumonia.

## INTRODUCTION

The fifth largest cause of death worldwide is lung and respiratory issues, which are frequent.

In India, respiratory disorders such as COPD, asthma, pneumonia, and tuberculosis are ranked third. A patient needs more invasive treatment, such as intubation and mechanical ventilation, to survive if they are unable to maintain a patent airway, appropriate gas exchange, or both. The most common form of life support employed in modern medicine, mechanical ventilation is a technique to artificially support or replace spontaneous breathing, although it is not without risks. Pneumothorax, cardiovascular compromise, ventilator induced lung injury, and, most significantly, ventilator associated pneumonia is among the physiological side effects of mechanical ventilation.<sup>1,2</sup>

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Mechanical ventilator associated pneumonia (VAP) is a type of lung infection that occurs in individuals who are receiving mechanical ventilation in hospitals or other healthcare settings. It is a serious and potentially life-threatening condition that can develop when bacteria, viruses, or fungi enter the lungs through the ventilator system.<sup>2</sup>

When a person requires mechanical ventilation, a breathing tube is inserted into their airway, allowing the delivery of oxygen and the removal of carbon dioxide. This invasive procedure can disrupt the body's natural defence mechanisms and provide a pathway for bacteria or other pathogens to enter the lungs.<sup>3</sup>

**Common risk factors for developing VAP include:**

1. *Prolonged ventilation:* The longer a person remains on a ventilator, the higher the risk of developing VAP.
2. *Supine positioning:* Being in a lying position for an extended period can impair the clearance of secretions from the lungs, increasing the risk of infection.
3. *Impaired cough and swallowing reflexes:* Conditions such as sedation, neurological disorders, or trauma can weaken the ability to clear the airway effectively.
4. *Weakened immune system:* Patients with compromised immune systems are more susceptible to infections, including VAP.
5. *Prior antibiotic use:* Over use or inappropriate use of antibiotics can lead to the emergence of drug resistant bacteria, increasing the risk of VAP.<sup>3,4,5</sup>

**Signs and symptoms of VAP may include:**

1. Fever
2. Worsening or new-onset cough
3. Increased or purulent sputum production
4. Difficulty breathing or shortness of breath
5. Chest pain
6. Rapid heart rate
7. Changes in lung sounds on auscultation

**Prevention measures for VAP are crucial and may include:**

1. Strict hand hygiene for healthcare providers and visitors.
2. Regular oral hygiene and mouth care to reduce the risk of aspiration of oral bacteria.
3. Elevating the head of the bed between 30 to

45 degrees to prevent aspiration and improve lung function.

4. Daily "sedation vacations" to assess the patient's readiness for ventilator weaning.
5. Regular assessment of the need for continued mechanical ventilation to minimize the duration of ventilation.
6. Regular cleaning and maintenance of the ventilator equipment.

**Objectives:**

1. To assess the ventilator associated pneumonia among patients on mechanical ventilator in experimental and control group.
2. To evaluate the effectiveness of ventilator bundle care checklist on prevention of ventilator associated pneumonia among patients on mechanical ventilator in experimental group and control group.
3. To associate the post-test score on prevention of ventilator associated pneumonia among patients on mechanical ventilator with their selected demographic variables in experimental and control group.

**METHODOLOGY**

Quantitative evaluative research methodology and a post-test only quasi-experimental research design were employed in this study. A total of 20 mechanically ventilated patients were chosen using non-probability convenience sampling approach. The samples were further assigned 10 in the experimental group and 10 in the control group. The experimental group receives the ventilator care along with their routine care, while control group receives only the prescribed routine care. A semi-structured interview schedule was used to acquire the data. Frequency, percentage, mean, and standard deviation are descriptive statistics. Chi-square test and unpaired T-test are inferential statistics.

**RESULTS**

Results showed that in the experimental group, 2 (20%) patients had severe illness during the post test, 5 (50%) patients had mild infection, and 3 (30%) patients did not acquire infection. In the control group, 6 (60%) patients had severe infections, compared to 4 (40%) patients with moderate infections. The post-test mean score for the experimental group was 1.71 and the post-test mean score for the control group was 2.88 and 1.56.



The average disparity was 26.

The estimated value of 5.18 was higher than the table value of 2.02, which at a p-value of 0.05 was considered significant. So, the research premise H1 was kept. There was no association between their chosen demographic characteristics and the prevention of ventilator associated pneumonia in the experimental or control group. This demonstrates that the ventilator bundle care checklist was successful in shielding mechanical ventilator users against ventilator associated pneumonia.

## DISCUSSION

### *Findings of the Study*

- In experimental group 3 (30%) patients were between the age group of 20–30 years and in control group 4 (40%) patients were between the age group of 51–60 years.
- Majority of the patients in experimental 7 (70%) group and in control 8 (80%) group were male.
- In experimental and control group 5 (50%) and 3 (30%) patients were ventilated due to CNS Disease problems respectively.
- Most of the patients had undergone 2nd hourly suctioning in experimental group 6 (60%) and in control group 4 (40%) patients had undergone 3rd hourly suctioning.
- Half of the patients in experimental group 5 (50%) and in control group 6 (60%) had the history of smoking habit.
- In experimental group 2 (20%) patients had no infection, 6 (60%) patients had mild infection and 2 (20%) had severe infection. In control group 3 (30%) had mild infection and 7 (70%) patients had severe infection.
- In experimental group mean score was  $1.6 \pm 1.02$  and in control group mean score was  $2.85 \pm 1.86$ , the mean percentage of experimental group was 33% and control group was 59%. The mean difference was 26.
- In experimental and control group the mean score was  $1.7 \pm 1.04$  and  $2.95 \pm 1.76$  Respectively. The 't' value was 5.20 which is significant, at  $p \leq 0.05$  level. Hence H1 was retained. Thus, it become evident that ventilator bundle was effective in preventing the ventilator associated pneumonia.
- There was no association in experimental and control group on prevention of ventilator

associated pneumonia with their selected demographic variables such as age, sex, reason for mechanical ventilation, frequency of suctioning, and history of smoking. Hence H2 was rejected among patients on mechanical ventilator with their selected demographic variables at  $p \geq 0.05$  level. *Implications:* The findings of the study will have the following implications in the various areas of nursing service, nursing education, nursing administration and nursing research.

### *Nursing Service*

- The study will help to understand the importance of ventilator care for the prevention of ventilator associated pneumonia among patients on mechanical ventilator.
- The study will teach the other nurses about the benefits & importance of ventilator bundle care check list in preventing the ventilator associated pneumonia among patients on mechanical ventilator.
- The study will provide with adequate exposure to the settings where the ventilator bundle is effective in preventing the ventilator associated pneumonia.
- The study will emphasize on training in using closed system suctioning catheter for the prevention of ventilator associated pneumonia.

### *Nursing Education*

- The nurse educator can use and provide the concept about the ventilator bundle on prevention of ventilator associated pneumonia.
- The study will help to explore the nursing curriculum, to be updated to implement the aspects of nursing care that are lacking to provide supportive education on ventilator bundle for the prevention of ventilator associated pneumonia.
- The nurse educator should emphasize on innovative and creative ideas pertaining to the prevention of ventilator associated pneumonia.

### *Nursing Administration*

- Nurse leaders should emphasize on training programmes on ventilator bundle and closed system suctioning of endotracheal tube

for the prevention of ventilator associated pneumonia.

- Nurse clinicians should initiate education program for nurses regarding ventilator bundle for preventing the ventilator associated pneumonia.
- Nursing experts should arrange in-service education programmes regarding various techniques for preventing the ventilator associated pneumonia.

### *Nursing Research*

- Findings of the study can be used by the future nurse/health care researcher as baseline in order to conduct further interventional research.
- Based on the research, CNE classes can be scheduled at frequent intervals using the sources of the study.
- The study result can help in further replication of the topic.

### **CONCLUSION**

The study was done to evaluate the effectiveness of ventilator bundle care checklist on prevention of ventilator associated pneumonia among patients

on mechanical ventilator at selected hospitals. The findings of this study demonstrated that the ventilator bundle was successful in preventing ventilator associated pneumonia in the experimental group of patients using mechanical ventilation. The prevention of ventilator associated pneumonia and the chosen demographic factors in the experimental and control groups did not show any correlation.

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# The Effectiveness of Isometric Exercises on Level of Pain among OA Patients

Grena J.

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## Abstract

The Study was conducted using Quasi Experimental pre-test and post-test Control Group research design, among 60 patients (30 control group and 30 experimental group) from Osteoarthritis samples were selected using purposive sampling technique. Data was collected using demographic variables, Modified Lequence Observational checklist and numerical pain intensity rating scale was used to measure the pain level. Study findings reveals that post-test level of pain among experimental group it was found that the mean value was 3.2 and the standard deviation was 2.35, whereas in control group mean value is 5.93 and standard deviation was 2.63 and the 't' value was 7.01, it shows that there is significant reduction in post-test level of pain in experimental group than post-test level of pain in control group at  $p < 0.05$  level. It indicated that isometric exercises were effective in reducing the pain among osteoarthritis patients.

**Keywords:** Osteoarthritis; Isometric Exercises; Pain; Modified Lequence Observational Checklist.

## INTRODUCTION

Osteoarthritis (OA) is the most common form of joint disease, with a prevalence of 22% to 39% in India. It is a slowly progressing non-inflammatory disorder of the synovial joints that affects the joint cartilage and joint capsule. It causes pain, loss of

function and disability affecting Quality of life.<sup>1</sup> Women are more likely than men to have OA, although as people get older, their frequency rises significantly.<sup>2</sup> Nearly 45% of women over the age of 65 have symptoms, while 70% of those over 65 have radiological evidence. OA of the knee, especially in women, is a significant factor in reduced mobility.<sup>5</sup> According to estimates, OA is the tenth most common reason for non fatal burden. The corner stones of managing OA are exercise and, if necessary, weight loss. The only equipment needed for isometric exercises is a comfortable area to perform them in a short amount of time.<sup>3,4</sup> JAMA. 2021;325(6):568-578.

The isometric exercises for osteoarthritis of the knee are made to increase thigh muscle strength without requiring a lot of movement near the knee

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joint. The main goal of the management strategy for knee osteoarthritis is the reduction of pain and disability. A non-pharmacological treatment for osteoarthritis pain is an isometric exercise.<sup>5,6</sup> The straight forward verbal explanation recommended to breathe deeply and relax while the muscle was contracting. Isometric exercise was performed twice daily for a total of 30 minutes over the course of seven days.<sup>7</sup> Physiowarzhish 2021.

### Statement of the Problem

A study to assess the effectiveness of isometric exercises on pain level among patients with osteoarthritis in selected village at Virudhunagar.

The main objectives of the study was to compare the impact of isometric exercise on level of pain among osteoarthritis patients in experimental group and control group.

$H_1$ : Compared to the mean post-test level of pain in the control group, the mean post-test level of pain among osteoarthritis patients in the experimental group will be significantly lower.

$H_2$ : The pre-test level of pain in patients with osteoarthritis in the experimental and control groups will significantly correlate with their chosen demographic characteristics. Age, sex, BMI, marital status, education, occupation, dietary habits, length of sickness, and length of treatment are all factors.

### RESEARCH METHODOLOGY

Study was conducted using Quasi Experimental pre and post-test Control Group research design, among 60 patients (30 control group and 30 experimental group) in Osteoarthritis clients with mild to moderate stage samples were selected using Purposive sampling technique. Data was collected using Data collection procedure, Demographic variables, Modified Lequence observational checklist and Numerical Pain Intensity Rating scale.

### Setting of the Study

The setting of the study refers to the area, where the study was conducted. The study was conducted in two villages in Virudhunagar. In that Zamin kollankondan was selected for experimental group and Avarampatti was selected for control group. This arrangement helped the investigator to carryout the intervention for the experimental group and also reduced the interruption from the control group.

### RESULTS AND DISCUSSION

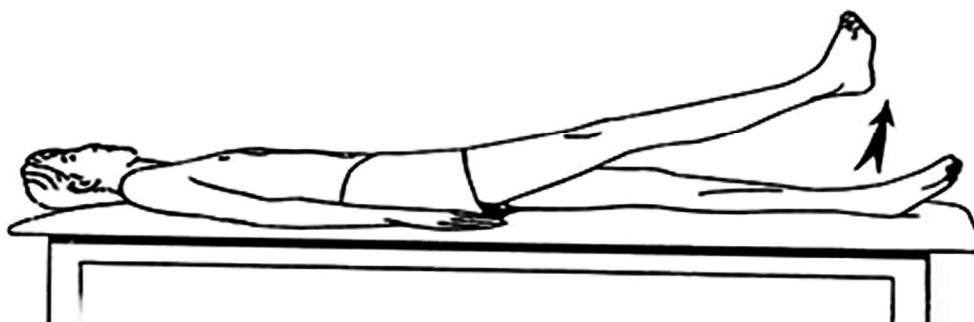
The pre-test mean was 6.17, the standard deviation was 2.07, and the mean difference was 2.97. The post-test mean value was 3.2, the standard deviation was 2.35, and the mean difference was found to be 2.97. The t value was 7.77, indicating that the table value is significantly higher than the calculated value. At a 0.05 level, it was discovered that the experimental group's post-test pain levels were significantly lower than their pre-test pain levels.

It was discovered that the mean value for the post-test level of pain in the experimental group is 3.2 and the standard deviation is 2.35, while the mean value for the post-test level of pain in the control group is 5.93 and the standard deviation is 2.63, and the 't' value was 7.01. This indicates that there is a significantly lower post-test level of pain in the experimental group than post-test level of pain in the control group at the p0.05 level.

### Description of Intervention

*Suggested that the patient sit or lie down with one straight leg.*

- Tell them to push the rear of the knee flat against the floor or bed by tensing the muscles in front of the leg as much as possible.
- Raise the heel or leg 4 to 6 inches off the floor or bed five seconds later.
- Return the heel or leg to the ground. As you lower your leg, keep the muscle in front of



your thigh as taut as you can, and then let it go.

- Perform the workout ten times, twice daily.

### **High Sitting Position**

- Tell the patients to sit on the edge of the bed with their legs hanging.

- Tell them to straighten their legs' knees, draw their toes up, and contract their thigh muscles.
- Return to the starting position after lifting each straightened leg individually to hip level.
- Follow the workout by repeating it twice daily, five times on each leg.



## **II. Step-up and Step Down Exercise**

### **Stay on the step's edge.**

- Position the foot on the about 7 inch high step. If necessary, hold on to a wall, chair, or other object for support.
- Step up and down gradually. Make sure

your hips are level and that your kneecap is walways in line with your second toe.

- Return to the starting posture by gently touching the heel of the opposing leg on the floor.
- Ten times each, twice daily, repeat the activity.



## **III. Wall Slide Exercise:**

- Stand with your back to the wall. The distance between the feet and the wall should be between 18 and 24 inches.

- Knee cap alignment refers to where it meets the second toe/shoes.
- Gently descend the wall while bending your knees 75 to 90 degrees.



- Keep this posture for five seconds. Get up and take a five second break.
- Perform the workout twice daily, 10 times total.

#### IV. Hip Adduction Exercise

- Tell the patient to sit or lie flat with their legs straight.



- Put an inch long roll under the knee to enable bending.
- Lift the heel off the ground by tightening the muscle in front of the knee as much as you can.
- Remain in this position for ten seconds.
- Perform the workout ten times, twice daily.

## CONCLUSION

Overall study findings proved that, rendering Isometric exercises to the osteoarthritis patient was effectiveness in reduction of knee pain. Therefore the investigator felt that the importance of isometric exercise for osteoarthritis patient used to reduce the level of pain.

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# Application of Abbreviated Burn Severity Index Score in Burns

Naveen Raj. S<sup>1</sup>, Ravi Kumar Chittoria<sup>2</sup>, Bharath Prakash Reddy J<sup>3</sup>

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## Abstract

Burn injuries are highly variable. The outcome of patients is influenced by various factors and requires prompt therapeutic interventions, including fluid resuscitation, for a favorable result. Although having varying shortcomings, many scoring indexes are developed and validated in Western countries to predict mortality in a burn patient. The Abbreviated Burn Severity Index (ABSI) estimates survival expectancy in a burn patient via various negative prognostic factors. This study describes the pattern of burn injuries to validate the ABSI as an outcome predictor in burnt patients.

**Keywords:** Abbreviated Burn Severity Index (ABSI); Score; Predict; Mortality; Burns.

## INTRODUCTION

With an annual fatality rate of 2.1% per 100,000 cases in Western and other developed countries, burn injuries are categorized as a major cause of mortality and life long disability globally. The

socio-economic conditions of burn patients and the patterns of burn injuries differ from place to place. Higher mortality rates can be explained by the higher rate of therapy restrictions for patients with self-inflicted burns. Demographics, such as age and sex, the burned surface area, concurrent inhalation injury, and comorbid conditions, such as diabetes, co-existing trauma, and pneumonia, are risk factors for mortality. Because of enhanced care in well-equipped critical care units, including skin banks and effective silver impregnated bandages with early wound care, survival rates of burn injuries are improving in developed countries but not yet established in developing countries. Even though regular assessments are an important element of burn care, the treating surgeon is nonetheless interested in predicting the outcomes of acute burn patients. This evaluation is critical because it aids in triage, leads management decision making, and allocates resources, which is especially crucial in resource constrained situations in a developing country like India.<sup>1</sup>

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**MATERIALS AND METHODS**

This study was conducted in the Department of Plastic Surgery at a tertiary care centre in South India after getting the departmental ethical committee approval. Informed written consent was taken from the patient’s parents. 1.5 year old female

child had accidental scald burns with hot milk. On examination, there are 2nd degree burns involving right arm, axilla and right side of chest (Total body surface area - 14%) (fig. 1). ABSI score was calculated which was 4 (fig. 2) and there is 98% chance of survival (fig. 3). Child admitted to burns ICU under Plastic surgery managed with Antibiotics, IV fluids



**Fig. 1:** Second degree scald burns involving right arm, axilla and right side of chest, (Total body surface area - 14%)

**Calculation of the Abbreviated Burn Severity Index score.**

BSA: body surface area

| Parameter                       | Finding | Points |
|---------------------------------|---------|--------|
| Sex                             | Female  | 1      |
|                                 | Male    | 0      |
| Age (years)                     | 0-20    | 1      |
|                                 | 21-40   | 2      |
|                                 | 41-60   | 3      |
|                                 | 61-80   | 4      |
|                                 | 81-100  | 5      |
| Inhalation injury               | Yes     | 1      |
|                                 | No      | 0      |
| Presence of full-thickness burn | Yes     | 1      |
|                                 | No      | 0      |
| BSA burn (%)                    | 1-10    | 1      |
|                                 | 11-20   | 2      |
|                                 | 21-30   | 3      |
|                                 | 31-40   | 4      |
|                                 | 41-50   | 5      |
|                                 | 51-60   | 6      |
|                                 | 61-70   | 7      |
|                                 | 71-80   | 8      |
|                                 | 81-90   | 9      |
|                                 | 91-100  | 10     |

**Fig. 2:** ABSI score

and analgesics. Dressings done with regenerative scaffold and Cyclical negative pressure wound therapy. She was posted in under GA for Wound debridement, Regenerative therapy - Autologous Platelet rich plasma (APRP), Low level Laser Therapy (LLLT), regenerative scaffold, Cyclical Negative pressure wound therapy. To prevent abnormal scarring, she underwent Autologous bone marrow aspirate, Autologous lipoaspirate therapy. Child recovered and she was discharged (fig. 4).

**RESULTS**

As predicted by ABSI score of 4, there was 98% probability of survival, This shows ABSI could predict the survival in the case under study.

**The ABSI score and prediction.**

ABSI: Abbreviated Burn Severity Index

| ABSI  | Threat to life    | Probability of survival (%) |
|-------|-------------------|-----------------------------|
| 2-3   | Very low          | ≥99%                        |
| 4-5   | Moderate          | 98%                         |
| 6-7   | Moderately severe | 80-90%                      |
| 8-9   | Serious           | 50-70%                      |
| 10-11 | Severe            | 20-40%                      |
| ≥12   | Maximum           | ≤10%                        |

Fig. 3: Probability of survival (98%) based on ABSI score in the case under study.



**DISCUSSION**

Several prognostic indices for burn injuries have been created over time. The earliest prediction model was based only on total body surface area (TBSA) involved and age.<sup>3</sup> However, this was highly limited in application as several factors modify survival probability.<sup>8</sup> Other indices formulated include the Baux index which was modified by Osler *et al.* and additionally included inhalational injury.<sup>4,5,10,9</sup> Other indices include the modified Bull grid which involves age and TBSA, and the Rayan *et al.* model which includes age more than 60, TBSA more than 40%, and presence of inhalational injury.<sup>6,7</sup> In our study, the patient's ABSI was 4 with a probability of 98% survival. Hence, ABSI was a reliable predictor of mortality in the patient with burns evaluated in this case study.

**CONCLUSION**

ABSI score may be used as the predictor of mortality/survival of a burn patient. Large randomized controlled study is required to validate our findings.

**Declaration & Disclosures**

None

**Authors' contributions**

All authors made contributions to this article.



Fig. 4: Child recovered and wearing compression garments

**Availability of data and materials**

Not applicable

**Financial support and sponsorship**

None

**Consent for publication**

Not applicable

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