

# Role of Nursing Care in Recovery of Burn Injuries among the Victims of Domestic Violence

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## ABSTRACT

**Background:** Burns due to domestic violence are responsible for physical abuse as well as emotional scars in long term consequences. Domestic violence can range from physical harm to sexual, psychological, and economic abuse, and it often escalates over time. Burns are one of the finest manifestation of domestic violence including severe pain, disfigurement and long term health complications. The recovery phase is also subject to mental, social and physical stress. Survivors are subject to experience severe anxiety, depression and post-traumatic stress disorder. Nursing care is what that can be answer to all above described mental and physical stress in the recovery phase or period of hospitalization.

**Aim:** To explore whether the nursing care do play a role in recovery of burn injuries inflicted due to domestic violence.

**Methodology:** The study included 250 victims of burns due to domestic violence who presented in AED of the Jinnah Hospital and filtered in the medicolegal clinic of the AIMC Lahore during the January to August period of the year 2018. An observational researched method was applied to rural and urban areas of the jurisdiction of said research setting.

**Results:** The study results show that professional nursing care and specialized health services plays a pivotal role with a grossly significant p value of 0.000 helping the burn victims of domestic violence to recover from their injuries as compared to general nursing services. The terminal outcome as also found significant with 0.025 p value.

**Conclusion:** The specialized health services and professional nursing care can significantly alter the outcome of the burn injuries. The likely outcome and complications can be avoided if a better and targeted services in reference to burn care could be rendered to the injuries of burns due to domestic violence. Hence the study emphasizes on the practicality of the role of nursing care as a vital aspect in terms of recovering from burning injuries.

**Keywords:** Burns, Domestic, Violence, Nursing Care, Injuries, Recovery

## INTRODUCTION

Burns are a class of injury that occurs when live tissue is exposed to extreme heat, chemical, electricity and radiations<sup>1</sup>. The injury may range from slight erosion or corrosion to amputations or even life threatening. Burns as a result of domestic violence are types of trauma resulting from physical abuse in the sphere of intimate relationships or households. Burns injury could be elicited intentionally or unintentionally<sup>2</sup>.

The treating remedies plays its role accordingly from an ordinary first aid care to specialized medical care. The severity is determined from the depth of injury caused by burns, extent of the tissue damage to the degree it digs deeper to complete charring and extinction<sup>3,4</sup>. Commonest outcome to burn trauma is rubor, tumor, calor, dolor and pain parallel to the sings of inflammation to blistering, scarring, charring and amputation coming under the umbrella of physical effects where vigorous efforts of doctors and professional nursing staff can be of valuable stance<sup>4,5</sup>. The emotional and psychological stress some other factor sometime outweighs the physical stress needs equal attention especially in terms of provision of just and legal remedies from the medicolegal officer to the honorable courts of the its area of jurisdiction<sup>6</sup>. Proper and skillful management of burns injuries are important to prevent complications and promote well-being<sup>7</sup>.

Out of significant psychological and physical trauma as result of domestic violence special medical care plays a critical role in the recovery of burn injuries. In the advent of modern and special medical care burn centers have been developed to cater the desired needs. The provision of modern equipment along with ambient environment and specialized trained medical stall can manage the complex needs of burn patients<sup>8</sup>. The treatment scope covers from wound care to pain management, from physical therapy to radical surgeries and from social well-being to psychological recovery all by the advanced and specialized medical services and personnel<sup>9</sup>. Special medical care providers work closely with the patient and their family to develop a

comprehensive care plan that addresses their unique needs and helps them achieve the best possible outcome<sup>10</sup>. By providing specialized care and support, medical professionals can help burn patients on their road to recovery and improve their quality of life. Healthcare professionals can play a crucial role in identifying and treating burn injuries resulting from domestic violence, and in providing support and resources to survivors<sup>9</sup>.

The role of professional nursing care beside all modern medical concerns is of paramount importance. The victims of burn specialized need is wound care and that wound care needs hands-on-care during the recovery process<sup>4,8,9</sup>. The specialized nursing care in burns is complex with special grasp in pain management and burn wound healing. They also play a key role in administering medications, monitoring vital signs, and helping the patient manage the physical and emotional effects of their injury<sup>11</sup>. In addition to providing physical care, nurses also provide emotional support and education to both the patient and their family, helping them to cope with the physical and psychological effects of the burn injury<sup>12</sup>. Professional nurses work collaboratively with other members of the healthcare team to develop and implement a comprehensive care plan that addresses the unique needs of each patient. Through their expertise and compassionate care, nurses can help burn patients on their road to recovery and improve their quality of life<sup>13,14</sup>.

## MATERIALS AND METHODS

The study was conducted on the unfortunate victims of burns because of domestic violence which were presented in Accident and Emergency Department of the Jinnah Hospital Lahore filtered in the medicolegal clinic of Alama Iqbal Medical College Lahore from January 2018 to August 2018 after IRB permission. The data was collected from the urban and rural areas population from the draining area of the Jinnah Hospital Lahore plus those referred to the said hospital from lower categories healthcare facilities. An observational researched method was applied on the victims of burns from both rural and urban development areas reporting at the mentioned research setting.

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The data was collected on a pretested questionnaire which was approved from the Ethical Review Board and Study Board of the Jinnah Hospital. Data collection was carried out after getting valid informed consent from the study participants through a quantitative questionnaire designed for the purpose. The study include those victims of the burns who consented to and those who were minor or their guardian did not consent were excluded from the study. There were a total of 250 research participants in the study collected during the eight months period of the year 2018. The data was analyzed in the SPSS Software version 21.0 data pack.

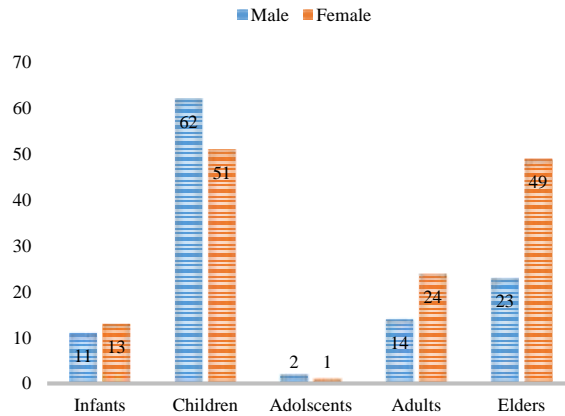
**RESULTS**

**Age:** There were a total of 250 burn victims of domestic violence. For better understanding the research participants were categorized in different age category of infants, children, adolescents, elders and adults as shown in the figure 01 below. Out which 24 were infants with age bracket of up to 1 year of age and 113 children of age from above 1 year up to 12 years. The adolescents were just three from 13 years to 25 years. The adults of age from 26 years to 50 years were 38 only. The elders of age above 50 years were 72 in number.

**Gender:** The study population comprised of 112 males and 138 females making a total of 250 participants. The ratio of male to female composition of different age groups is shown in the figure 01 above. There were 11 males and 13 females in the infant age group of burns victims. The children category comprised of 62 males and 51 females. The shortest age group of three adolescents contained 2 males and just a female. The adults in total were 38 in the said age group with contribution of 14 males to 24 females. The last age of above 50 years of adults with a total of

72 unfortunate victims of burns turned out to be 23 males and 49 females.

Figure 1: Age and gender



**Role of nursing care:** The role of nursing care was analyzed in relation to the determination of the recovery of burn injuries in the study. The data was analyzed in terms of the level of nursing care either was dealt by a trained staff with qualified caring skill to cater the needs of burn victims in the health facilities where burn center were present versus those where an ordinary or usual care was render by a routine staff. The data is presented in the table 1

Table 1: Nursing care levels (n=250)

Healthcare Facility	Level of Nursing Care			p value
	Professional (n=155)	General/Standard (n=95)	Total	
Primary Healthcare Facility (Dispensary/BHU/RHC)	0	6	6	0.000
Secondary Healthcare Facility (THQs/DHQs)	14	28	42	
Tertiary Healthcare Facility (Teaching Hospitals)	138	64	202	
<b>Terminal Outcome</b>				0.024
Survived	111	41	152	
Expired	68	30	98	

The burn victims were classified on the basis of the level of the nursing care they received. In the first category of primary healthcare facilities like those of dispensaries, basic health units (BHUs) and rural health centers (RHCs) and presented in the tertiary care for referral purposes and upon assessment no special care was needed and were dealt on out-patient level departmental care, therefore were considered and placed in standard or usual nursing care. The other category catered the burn victims both with specialized nursing care versus that of ordinary or standard or usual nursing care. Those categories of healthcare facility include the secondary health care facility including Tehsil Head Quarters (THQs) and District Head Quarters (DHQs) and Teaching Hospitals (THs) in the Tertiary Care Hospitals.

There were a total of 6 cases of burns of domestic violence out of 250 which were definitely catered at standard or usual nursing care in the primary healthcare facilities of BHUs and RHCs with no or zero patient of burns being dealt there. Opposed to that there were 42 burn victims out of which two third i.e. 28 were treated by usual or standard nursing care facilities while remaining one third making a total of 14 were treated medically by specialized nursed in the secondary healthcare facilities of THQs and DHQs. In the best healthcare services of the country i.e. the teaching hospitals; tertiary care hospitals there were 202 burn victims of domestic violence out of the total of 250. Among those in THs more than half of total (202) there were 138 making more than two third of the total were treated by specialized staff nurse trained for the purpose in burn units designed for burn patients and rest 64

were treated by usual staff nurse or those of standard nursing care skills in general surgical units.

The results were grossly significant with a p value 0.000 when analysis was made in terms of recovery of the burn injury among the victims of domestic violence as treated by standard nursing care versus those of the specialized nursing care. The results revealed that nursing care in recovery of burn injury plays a pivotal rule. Those being treated with generalized standard nursing care are at the brink of complications and lifelong eventualities while those treated with specialized nursing care could have better life survivability and least complications.

When the terminal outcome was analyzed, the results showed a p value of 0.024 being grossly significant as it was less than 0.05 and hence role of nursing care cannot be taken anything less than consequential when it comes to treatment of burn victims. Out of total 179 the survivors were just 111 when treated with specialized medical care with specialize nursing skill care takers while 68 could not breathe eventually. Among 71 of the standard medical care involving general nursing care only 41 could make it life and remaining 30 breathed their last in the struggle.

**DISCUSSION**

An ordinary nursing care and specialized professional nursing care differ significantly in the way they care for a victim of burns. Ordinary nursing care may refer to the basic level of care provided by registered or licensed practical nurses without specialized training in burn care. In contrast, specialized professional nursing

care is provided by nurses who have received specialized training in burn care and have experience working with burn patients<sup>14</sup>.

Specialized professional nursing care involves a more comprehensive approach to care, as burn injuries require specialized knowledge and skills to manage<sup>15</sup>. The study revealed that burn injuries recovery is pleasantly amazing with specialized nursing care as compared to that generalized nursing care. This includes knowledge of wound care, management of pain, fluid and electrolyte therapy<sup>16</sup>. A specialized nurse will have knowledge of wound assessment and management, including the use of specialized dressings, and the monitoring of wound healing. They also have expertise in administering medications and providing nutritional support to ensure proper healing<sup>17</sup>.

Moreover, specialized nurses can assist in psychological and emotional support for the patient and their family, which is essential in the recovery process. They can help patients cope with the trauma of the burn injury and manage their pain, anxiety, and depression<sup>5,8</sup>.

## CONCLUSION

The study concludes that where ordinary nursing care provides essential care and support for burn patients, specialized professional nursing care provides a higher level of expertise, knowledge, and skill that is critical in the care of burn victims. The recovery of burn injuries with specific nursing care is very early devoid of complications as offered in specialized healthcare centers i.e. tertiary care hospitals as compared to those that offer no such level of care.

**Recommendations:** It is highly recommended that the cases of burns should be taken purely on mode of entry till to the point of exit for better understanding of the specialized or professional nursing care like those who got special nursing care versus those who could not. The current study includes the referral cases from lower healthcare facility as contrary group which may or may not be true because the facts are based on the findings or the history the patient provided by him/herself.

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