

Running Head: ASSIGNMENT



Name of the Student

Date

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Introduction

The treatment of burns and wound healing has evolved with increasingly sophisticated technology and intensive care. These advances in the treatment of burns have reduced mortality rates, and it is now believed that almost all burn patients have a good chance of survival (Aldridge et al., 2020). However, a higher survival rate means that more people who survive burns will have serious problems during the recovery period.

This essay discusses communication technologies where electronic methods can be used to provide psychological support. The UK's burn group must be ready to adapt and grow in everchanging healthcare, as the National Health Service (NHS) was reorganised into a 2012 Health and Welfare Act and merged with other shocks (England and Improvement, 2019). Services must be tailored to patients' social and health needs so that patients can decide how to receive the health services that best suit their needs. While the treatment of burns is the main theme of this essay, one encourages readers to think about how technology can facilitate the maintenance of other services.

Burn care settings

The preventive use of antibiotics in public hospitals is a common practice. Still, other medical facilities with infection control only use antibiotics more effectively during surgery or when sepsis is suspected. The general surgeon pointed out the inability to treat burns and the lack of the material (Litchfield, Moiemmen and Greenfield, 2020). The surgeon has concluded that further education and training is needed to treat burns effectively. There are multiple health care professionals who are in this field to serve humanity and take care of individuals with the help of their expertise (Ahmed et al., 2020). The patients who live at the medical centre also put the fire victims in great distress, limiting their access to the medical centre (Ptasinska et al., 2021). The

contraindications also concern the vision of patients with malformed burns; pregnant survivors are still hidden from women during childbirth as the foetus is generally thought to have the same malformation/scar.

All centres identified barriers to the appropriate treatment of infections (Burn et al., 2018). An insufficient number of beds in public hospitals makes it impossible to isolate patients' burns, especially in large hospitals in large cities, which increases the possibility of spreading the infection (Davies et al., 2020). It is reported that painkillers, resuscitation fluids and dressings are required for the treatment of the burns to be catered effectively. Various local care methods are used, including the cheap and available banana leaf mill. Due to limited resources, patients who are unlikely to survive on comfort care often go untreated.

No public hospital uses objective tools to assess rehabilitation, and no organised program has a prescription or rehabilitation plan (Kenedy et al., 2018). Rehabilitation with psychological support is limited, especially in public hospitals (Onah et al., 2019). The main concern of all healthcare professionals is to respect the conditions of use and the contractual design of protective clothing against hypertension after discharge (Burns, 2018). Plastic surgeons have also raised concerns about self-esteem, prejudice and the resulting isolation. Driving to the Rehabilitation Medical Centre is considered a major challenge (Aldridge et al., 2020).

Care enhancement

All severely burned patients should be hospitalised, and when treating fire patients, it is necessary to ensure that the airway is not blocked. Injuries due to inhalation of smoke are very common, especially when the patient burns in an enclosed space (such as a room or building). Even patients who have been burned outdoors can suffer from smoking. People with upper-body injuries or burns and people who inhale carbon or soot are most at risk of inhaling the smoke

(England and Improvement, 2020). If there is a risk of damage to the airways, the anaesthetist or surgeon will insert the tube through the patient's nose or mouth into the trachea. This tracheal intubation allows one to deliver high oxygen content and use a mechanical ventilator.

The next priority is a treatment-related burn and this requires installing a venous channel where resuscitation fluid can be injected; special lines are also restored to check the resuscitation condition. When the injection is inserted into the bladder to monitor urine flow, another indication of fluid resuscitation. Most fire stations treat victims by intravenously injecting intravenous saline (lactic acid ringer) within the first 24 hours; this solution can replace liquids lost in the environment during burning and incineration (Guest, Fuller and Edwards, 2020). Blood transfusions are usually unnecessary because most burns lose very little blood and less than 10% of the blood is haematopoietic (i.e. red blood cells are destroyed) (Sheard and Peacock, 2019). However, haemodialysis of the blood can cause serious side effects, especially in the kidneys; if it is severe enough, it can even lead to kidney failure. This risk can be reduced by initiating immediate resuscitation and stimulating diuretics (such as mannitol).

WoundFlow software is designed to complement traditional Lund-Browder paper scripts for measuring and monitoring periodic burns (England and Improvement, 2019). The ability to closely monitor burn improvements over time supports future clinical trials and studies comparing recovery rates and results after different treatments. In particular, this study shows that delays in wound healing are significantly associated with an increased risk of death. Being able to predict whether burns will heal naturally will greatly improve patient care. In addition, a customised treatment plan for each patient can improve the effectiveness of treatment and shorten the time for practical recovery, thus reducing the overall cost of treatment. Biomarkers can provide tools for individual treatment and provide information on wound healing techniques.

Strong efforts to identify biomarkers for predicting wound failure have suggested that serum cytokines such as interleukin three and 12p70 and serum procalcitonin are unrelated to wound failure. Other candidates have been identified, but more work needs to be done to mimic serum's complex cytokine time cycle as an effective predictor of wound healing.

In addition to evaluating serum cytokine testing, applicants have also been labelled for biomarkers in wound drainage, which may be a better predictor of local wound healing than cytotoxic blood cells. Wounds that produce an increase in immunogenic and anti-inflammatory cytokines, such as interleukin 1 β , interleukin 2, interleukin six and tumour suppressor alpha, have been shown. Indeed, the ratio of dipeptidyl peptidase IV to aminopeptidase detected in fire excretion is significantly different from plasma. Other tissue samples with localised wound biomarkers have shown that many proteins are activated during wounding (Blake, RoadleyBattin and Torlinski, 2019).

In addition to examining burns and wound discharge directly, invasive imaging is not another possible method of examining the healing potential of burns (Ahmed et al., 2020). For this reason, various non-invasive imaging methods that can be used to determine the depth of burn have been studied (Litchfield, Moiemmen and Greenfield, 2020). Such techniques include but are not limited to terahertz, local frequency imaging, near-infrared spectroscopy, and confocal reflection microscopy (Davies et al., 2020). Although many of these methods have not been fully developed for clinical use, the most successful imaging studies of burns have looked at blood flow, such as laser Doppler imaging and green angiogenesis. Laser Doppler images provide the most clues to assess the severity of burns accurately, but laser Doppler images exceed the visual evaluation only 48 hours after heat dissipation (Onah et al., 2019). Further research is needed to examine the feasibility of regularly performing non-invasive imaging in the treatment of burns.

Conclusion

The quality development project has identified some barriers to burn treatment in primary, regional and university UK. This study shows how the lack of standards for fire care, the diversity of knowledge and skills of health professionals in fire protection, and the lack of resources significantly impact the quality of fire care. Many health care professionals working in districts and clinics have pointed to the lack of standardised clinical guidelines for the treatment and recovery of acute burns as a key issue. Setting standards is an important policy to improve the quality of care, strengthen the health care system and improve patient performance. This includes advice on the resources and actions needed to achieve the best possible patient outcomes and a framework for training plans and the training of fire specialists in this context. These guidelines can be used as a basis for developing standards for the treatment of burns in the UK.

Due to a lack of funding in many facilities, the provision of hospital rehabilitation services is limited, and there is no standard fire rehabilitation plan between facilities. Due to the long-distance and disgrace associated with burns, patients are afraid to return to outpatient rehabilitation centres at the regional level. These challenges suggest that the development of community fire rehabilitation services may be more effective in providing adequate care in such situations. Since the World Health Organisation (WHO) approved the program in 1978, the approval of CBR programs has increased. Such community rehabilitation methods enable communities to design and implement services that meet local needs while promoting local human, financial and material resources to increase resilience.

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